

20-20-20 Airship NASA Centennial Challenge RFI Response Template

Instructions:

Responses should be submitted in Adobe PDF or Microsoft Word format and are limited to five (5) pages in length. Responses should include (as applicable): name, address, email address, and phone number of the respondent, business, or organization, with point of contact for business or organization.

RFI response documents should be saved with a filename of the form
202020_RFIresponse_Name_Organization_Date.doc OR Name_Organization_Date.pdf

This template is split into sections.

Template 0 is for all respondents (*Page 2*)

Template 1 is for Competitors (*Page 3*)

Template 2 is for the Science Community (*Page 6*)

Template 3 is for the Commercial Community (*Page 7*)

Template 4 is for Allied Organizations (*Page 9*)

Template 5 is for Partners for Payload Development (*Page 10*)

Respondents are NOT required to use the template for their RFI response and may include more (or less) than suggested by the space provided. Respondents are also NOT required to address every question in the template. However, detailed responses will be greatly appreciated by the challenge developers to ensure all concerns are addressed in the final challenge rules.

Template 0 – All Respondents

Name:

Organization:

Address:

Phone Number:

Email Address:

Point of Contact for Business or Organization:

Template 1 – Competitors

Interest:

Are you interested in participating in this competition?

Would the requirement that you must gain your own FAA approval for your airship impact you significantly?

Are there other barriers that can be addressed in the timelines, requirements, and formulation of these challenges?

Competition Milestones and Phases:

Is the requirement of traversing a specified path in Tier 2 sufficient to demonstrate the full extent of the airship capabilities?

Please comment on the minimum time window needed for launch. Are there other concerns regarding technical requirements, or aspects of the challenge competition Milestones and Rules that should be added, modified, or deleted?

Please remark on the benefits/drawbacks of the preferred model of a simultaneous, head-to-head competition, at a centralized location versus allowing teams to compete at any time during the competition, with a 30 day notice of intent to launch, at self-selected locations?

Are there metrics beyond the primary objectives of the Challenge that should be incentivized in the scoring rubric or with bonuses, such as stricter margins, sprint speed, additional flight duration, reusability of the airship, demonstration of additional payload capabilities e.g. pointing and measurement sensitivity, etc.?

Competition Awards:

NASA is considering up to \$2.7M in prizes. How could the award structure best incentivize participation and technical progress?

Is the prize money sufficient to incentivize potential competitors?

Please comment on the award scenario being considered. Are there alternative scenarios providing greater incentives to compete?

Competition Name:

Please suggest official names that best, succinctly, characterize this Centennial Challenge. Please provide comments on how the naming could increase the public interest in the prize competition.

What other actions should be taken to increase public interest?

Template 2 – Science Community

Technology Development and Utilization:

Are you interested in using airships as a scientific platform?

What scientific goals would you hope to achieve with an airship?

What technological requirements should the airship have and/or demonstrate in order to meet your scientific goals (e.g., altitude, station keeping or event tracking, payload capacity, platform stability, etc.)?

Are you interested in potentially including a science instrument as additional payload for the Tier 2 competition?

Template 3 – Commercial Community

Technology Development and Utilization:

Are you interested in using airships as a commercial platform?

What commercial goals would you hope to achieve with an airship?

What technological requirements should the airship have in order to meet your commercial goals (e.g., altitude, station keeping or event tracking, payload capacity, platform environment/stability, etc.)?

Are there specific emerging breakthrough technologies that are applicable to the competition?

Are there specific commercial space and/or non-space related applications for the capability?

Are there ways to adjust the competition metrics that would assist with the synergy with commercial space and/or non-space applicability?

Template 4 – Allied Organizations

Interest:

Are you interested in partnering with NASA to plan and execute the airships challenge as an “Allied Organization”?

Competition Name:

Please suggest official names that best, succinctly, characterize this Centennial Challenge. Please provide comments on how the naming could increase the public interest in the prize competition.

What other actions could be taken to increase public interest?

Template 5 – Partners for Payload Development

Interest:

Are you interested in partnering with NASA to develop and build the 20kg payload?

What can your organization (educational institute) provide to this partnership (expertise, hardware, public outreach opportunities, etc.)?