

Goal of Launch 发射目的

The first Launch of the PARC is intended for recording footage for publicity of the club to recruit new members and familiarizing PARC members with rocket launch protocols.

火箭社的第一次发射皆在为社团宣传提供素材, 并使参与火箭发射的成员熟悉发射步骤。

Launch Preparation 发射准备

Rocket purchase (火箭采购): Mickey

Rocket assembly (火箭组装): Mickey & Ethan

Launch Location (发射地点): 14200 Las Vegas Blvd S

Launch Participants (发射成员): Mickey, Ethan, Bensen

Rockets sized by radius: 3 small rockets, 2 large rockets.

火箭大小: 3枚小型火箭、2枚大型火箭。

Rocket Capacity: ~ 1500 ft

发射高度: 大约460米



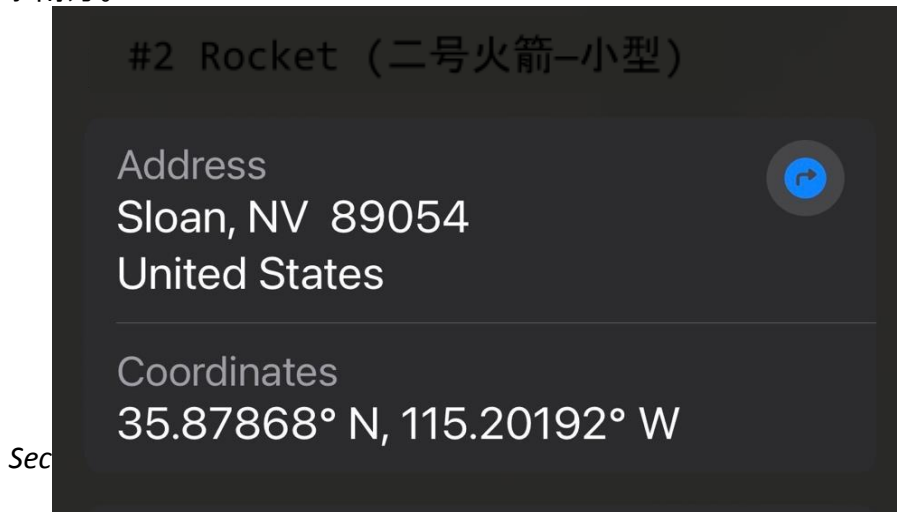
Rocket Components / 火箭零件

Launch Details 发射情况



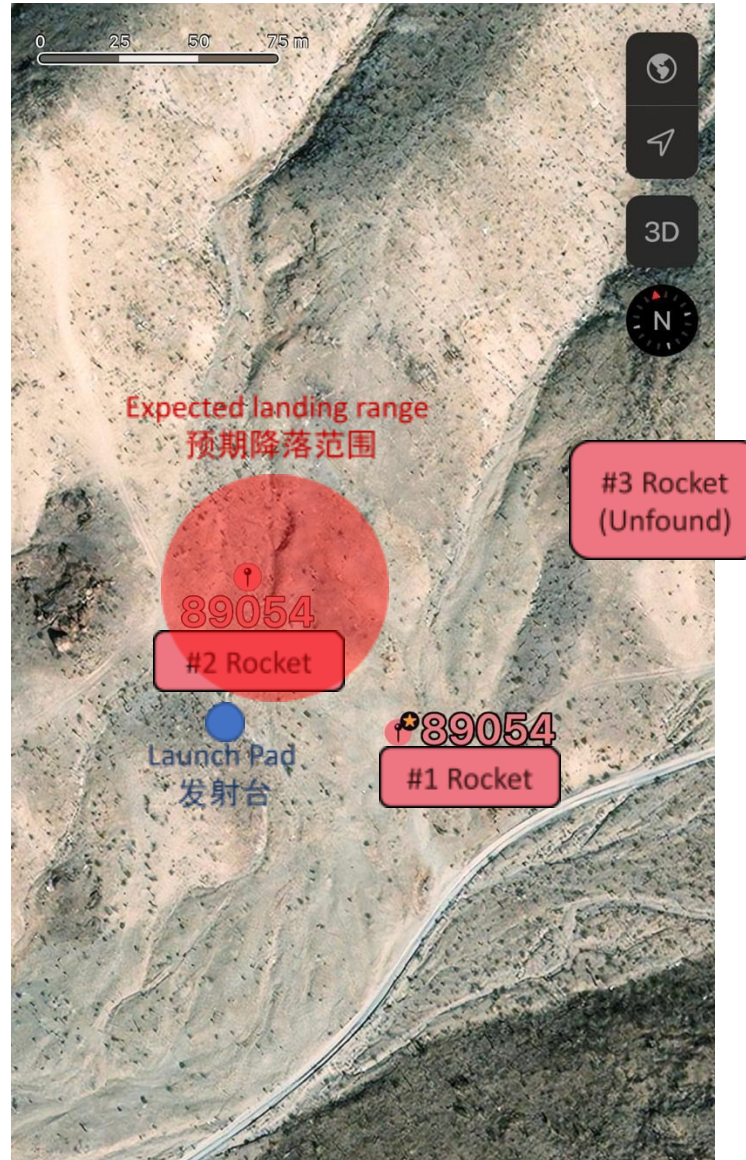
The first rocket is a small-sized rocket. Its payload landed southeast compared to our expected landing range, which flew right over our heads. This launch result was unexpected due to a sudden change in wind direction combined with the uncaredful positioning of the launch direction of the rocket.

我们发射的第一枚火箭是一枚小型火箭。由于风向突然改变和无法固定火箭发射方向，它的发射严重偏向东南方。



The second rocket is a small-sized rocket. Its payload landed exactly where we expected it to land. It landed in the northern hills, which is safe and easy to locate for us. Although the parachute didn't fully expand due to improper loading, the general launch of this rocket was a success.

我们发射的第二枚火箭也是一枚小型火箭。幸运的是，它的载荷舱正好落在我们预期区域。它安全降落在了北部的山丘上，很容易被我们找到。虽然由于装载不当，导致载荷舱的降落伞没有完全展开，但总体上，这枚火箭的发射是成功的。



Rocket Launch Site (Presents landing points of rocket payloads) | 发射分布图

The third rocket is a small sized rocket. Its payload landed uncontrollably. The payload flew far toward the eastern hills, where we couldn't locate. This failed landing was majorly due to high windspeed upon launch, which shifted the launch direction of the rocket. The failure could've been avoided by waiting for the winds to clear and then launch the rocket.

我们的第三枚火箭是一枚小型火箭。它的载荷舱在发射后落在了严重偏东的位置。由于距离太远，我们无法找到它。这次失败的主要原因是发射时风速过大，改变了火箭的发射方向。如果我们当时等待风速减小后再发射火箭，那么这枚火箭的载荷舱应该能够着陆在理想区域。

The fourth and fifth rockets are both large-sized rockets. They both failed to launch due to issues with activating the gunpowder fuse. Members of the PARC need to work on better understanding the rocket ignition system.

我们计划发射的第四和第五枚火箭都是大型火箭。然而，由于我们对火药引线系统的操作不当，它们都未能成功发射。这两枚火箭的发射失败反映出火箭社成员对于火箭点火系统的认识不足。

Conclusion结论

There were three out of five successful launches. Unfortunately, we couldn't get the big rockets to launch, but we've captured sufficient footage of the rockets for publicity. This rocket launch demonstrated club member's lack of general rocket knowledge and especially on the rocket ignition system. In addition, more members have to be familiar to the rocket launch protocols.

我们一共发射了五枚火箭，其中三枚发射成功。不幸的是，我们没能成功地发射两枚大型火箭，但我们已经拍摄了足够用于宣传的火箭发射视频。这次火箭发射揭露了社团成员对于火箭整体知识的相对欠缺，尤其是点火系统方面。此外，更多的社团成员需要熟悉火箭发射的流程。

Signature of Clerk:

Bensen Liu

Date of Recording:

04/11/23