

# Interstellar Technologies to launch TENGA Rocket on July 31 2021

## First single sponsor, first civilian payload release and recovery

TENGA Co., Ltd. (Minato, Tokyo; CEO: Koichi Matsumoto; hereafter "TENGA") and Interstellar Technologies Inc. (Taiki, Hiroo-gun, Hokkaido; CEO: Takahiro Inagawa; hereafter "Interstellar") will be targeting Saturday, July 31 2021, as the launch date for their "TENGA Rocket" project. TENGA Rocket will be the first single-sponsor launch of Interstellar's MOMO sounding rocket series and will also carry the first privately developed payload release and recovery mission in Japan. Interstellar is also aiming to reach space a second time in a row after the successful launch of "Rocket of NEJI" on July 3 2021.



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**Release materials including images:**

<https://drive.google.com/drive/folders/1XnkK4zvZ4ZaXSQI576U5efHw0ReaTa9y?usp=sharing>

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# ① About the TENGA Rocket Launch

## TENGA Rocket Launch Summary

- **Launch Target** : Saturday July 31 2021, 11:00 JST (02:00 UTC)
- **Launch Windows** : Saturday July 31 2021, 11:00-12:20, 16:05-17:50 JST  
(02:00-03:20, 07:05-08:50 UTC)  
Backup: Sunday August 1, 4:15-7:50, 11:00-12:20, 16:05-17:50 JST
- **Launch Site** : Hokkaido Spaceport Launch Complex-0 (Taiki, Hokkaido)
- **Launch Updates** : Will be announced on Interstellar's social media  
Facebook : <https://www.facebook.com/istellartech/>  
Twitter : <https://twitter.com/natsuroke>

## Launch Live Stream

### Bringing space and the release of TENGA ROBO to you live!

The rocket launch will be streamed live on the official YouTube channels of both TENGA and Interstellar.

The live stream will start 90 minutes before launch and feature Gonzales Maruyama, the journalist known from shows such as TBS' CRAZY JOURNEY, as MC. Cockpit views, the moment TENGA ROBO leaps out into space, and views of earth seen from the rocket will be shown on the live stream in real time.

There is no area for viewing the launch in person, we hope many people will be able to enjoy the launch live stream.

#### ▼Live Stream URL

**TENGA Official YouTube Channel**

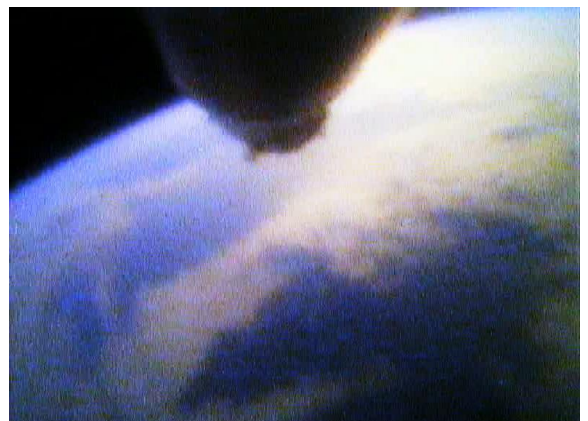
<https://www.youtube.com/channel/UCeyIv-Fw9LGunzZ-LTY3dxw>

**Interstellar Technologies YouTube Channel**

<https://www.youtube.com/channel/UCxqoT-HSpNZeIZaT5dgHXaQ>



▲Cockpit Camera



▲Realtime Flight Footage  
(image from "Rocket of NEJI" (MOMO F7)  
vehicle camera)

# ① About the TENGA Rocket Launch

## No Audience for the Launch

As a preventative measure against the spread of COVID-19, strict measures such as closure of public viewing areas, expansion of restricted areas, and no audience for the launch will be implemented.

### 《COVID-19 Prevention Measures for the TENGA Rocket Launch》

- Target date announcement held off
- Closing viewing areas and conducting launch without audience
- Asking viewers to not come to Taiki
- Expansion of restricted areas to reduce potential viewing spots
- Patrolling potential viewing areas outside the restricted areas
- Expansion of live stream offerings on YouTube and Niconico
- Notification of restricted areas in newspapers and flyers

## ② Missions of the TENGA Rocket Project



It all started when TENGA's CEO Matsumoto was on a TV show together with Interstellar's founder Horie and learned about Interstellar's space business.

Interstellar's vision of *creating a future where everyone can reach for space*, and TENGA's vision of *bringing sexuality to the forefront, for all to enjoy*. With the visions and maker spirit of both companies resonating, the TENGA Rocket project was born.

▼TENGA Rocket Project Website: <https://rocket.tenga.co.jp/81/>



### MISSION① Carrying Wishes of Love and Freedom from 1000 People to Space

We collected messages from 1000 People, which are stored in a TENGA-shaped message pod which will be mounted to the rocket, and eject everyone's thoughts into space.



### MISSION② TENGAROBO to Space and Back

TENGA's official mascot TENGAROBO will ride to space on TENGA Rocket! After reaching space, TENGAROBO will exit the rocket and return to earth.



### MISSION③ Space TENGA Development

A TENGA CUP outfitted with sensors will be launched on the rocket to observe how it is affected by the flight to space. TENGA Rocket will mark the first step towards Space TENGA development. As a first in history, TENGA will finally go to space!



### ③ Launch Vehicle Specifications

#### Sounding Rocket MOMO

MOMO is the sounding rocket privately developed and manufactured by Interstellar Technologies. It is designed to fly to an altitude of 100km, and then splash down ballistically into the ocean. The microgravity environment experienced during ballistic flight can be used for scientific experiments. MOMO was designed with the goal of creating the most affordable and most convenient rocket in the world, to allow anyone to reach for space. Using high levels of in-house manufacturing and combining design, manufacturing, testing and operations under one roof reduces the cost by an order of magnitude compared to other rockets, and makes the rocket useful not just for science but also for branding and marketing launches. So far 34 sponsors have contributed over 7 vehicles.

In May 2019, MOMO F3 first reached space. In July 2021, after roughly a year of upgrade development, the New MOMO F7 (Rocket of NEJI) reached space again. TENGA Rocket (New MOMO F6) hopes to become the second flight in a row to reach space after F7.

#### About TENGA Rocket

TENGA Rocket is a MOMO sounding rocket emblazoned with a design featuring TENGA’s brand message of “Love, Freedom, and TENGA”. One of MOMO’s advantages is being able to adapt to special missions, and this time it will attempt the three missions listed on the previous page. In particular, MISSION ② will be the first civilian mission to recover a payload ejected in space from the ocean, and if it succeeds will expand the possibilities of MOMO and create new possibilities for sounding rockets.

<b>Propulsion System</b>	<b>Liquid Fueled Rocket Engine</b>
<b>Propellants</b>	<b>Ethanol / Liquid Oxygen</b>
<b>Thrust</b>	<b>14kN (1.4 tons)</b>
<b>Fueled Mass</b>	<b>1220kg</b>
<b>Dry Mass</b>	<b>370kg</b>
<b>Vehicle Length</b>	<b>10.1m</b>
<b>Vehicle Diameter</b>	<b>500mm</b>
<b>Target Altitude</b>	<b>100km</b>

