

SpaceX FRAM2 Mission and a Glimpse at one of the Pioneers of Commercial Space Tourism

A pioneer of space tourism was Walter P. Kistler. At the International Symposium on Space Tourism (ISST) in 1997 he predicted: [1]

“Sooner or later space tourism is bound to arrive and a vehicle to handle it will certainly be developed.”

It looks like that we have reached this development with Elon Musk’s SpaceX Crew Dragon spacecraft – but will it be a market with the expected growth potential of a 100 to 1000 passengers per year? [1]

It looks like the ticket price of around \$55 million per seat on the Crew Dragon spacecraft suggests that the space tourism is currently limited to “well heeled” millionaires or commercial/public sponsors.

FRAM2 was a private human spaceflight mission operated by SpaceX with a Crew Dragon spacecraft on behalf of entrepreneur Chun Wang. During the mission, Wang and his all-civilian crew — Jannicke Mikkelsen, Rabea Rogge and Eric Philips — were launched into a polar orbit, a first for a human spaceflight mission allowing to observe the North and South poles during one orbit.

The mission launched from Launch Complex 39A at the Kennedy Space Center on 1 April 2025 at 01:46:50 UTC. During the four-day mission Rabea Rogge, the first German woman made her debut in space and the crew conducted scientific research and completed the first commercial polar orbit mission autonomously without a pilot onboard.

The mission concluded successfully with the splashdown in the Pacific Ocean off the coast of Oceanside, California on 4 April 2025 at 16:19:28 UTC. It was the first Pacific splashdown for a Crew Dragon mission. [2]



*One happy tourist crew:
Rabea Rogge, Jannicke Mikkelsen(from left)
Eric Philips and entrepreneur Chun Wang*



*The Crew Dragon Resilience cruising over the
North Pole*



*Live TV during Crew Dragon’s reentry
Touch down!>*



This recent space tourism success shall be used to look back at the achievements of the space tourism pioneer Walter Kistler.

Walter P. Kistler (1918–2015) was a Swiss-American physicist, inventor, and entrepreneur whose visionary efforts significantly influenced the early development of space tourism.

In 1993, Kistler co-founded Kistler Aerospace Corporation with the ambitious goal of developing the K-1, the world's first fully reusable aerospace vehicle. His pioneering work in reusable launch vehicle technology laid the groundwork for more accessible and cost-effective space travel, contributing to the broader vision of space tourism. [3]

Beyond his work with Kistler Aerospace, Walter Kistler was an advocate for private spaceflight ventures. He reportedly contributed funding to the Ansari X Prize, a competition designed to encourage the development of privately built manned space vehicles. The prize was awarded in 2004 to SpaceShipOne, marking a pivotal moment in the history of private space exploration. [4]

He received the Space Tourism Pioneer Award for his entrepreneurial efforts in the field. [5]

During the International Symposium on Space Tourism in 1997 [1] Kistler presented an analysis of two conceptual launch single stage to orbit (SSTO) systems designed for space tourism, the Venture Star (Lockheed Martin) and a ballistic SSTO vehicle by the Japanese Rocket Society.

He calculated and predicted a ticket price for the Venture Star of \$25 Mio per seat, provided 50 passengers could be accommodated within the payload bay.

The Japanese SSTO would accommodate around 20 passengers in an 18 meter diameter capsule 22 meters in length. The ticket price as assessed by E. Koelle, TCS-TransCostSystems, and also presented at the ISST ranged between \$1Mio to an optimized \$500 k. [1]

The ticket prices were pretty far off compared to what transpired in the last 25 years, however the ballistic, reusable SSTO idea developed, designed and perfected by SpaceX proved to be the right one.

References

[1] International Symposium on Space Tourism, Bremen, Germany, March 20-22, 1997:



[2] <https://en.wikipedia.org/wiki/Fram2>

[3] [WikipediaWikipedia+1satmagazine.com+1](https://www.wikipedia.com+1satmagazine.com+1)

[4] [kistler.com+5NASA+5Wikipedia+5Southern Poverty Law Center](https://www.kistler.com+5NASA+5Wikipedia+5Southern Poverty Law Center)

[5] oac.cdlib.org+1Wikipedia+1

