



ANALYTICAL PROBLEMS OF SAILING IN SPACE FOR SOLAR SYSTEM RESEARCH

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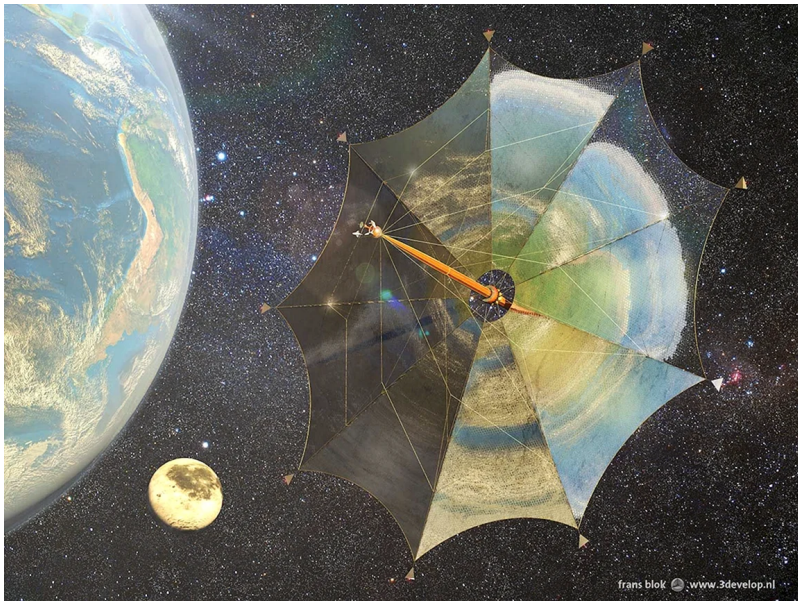
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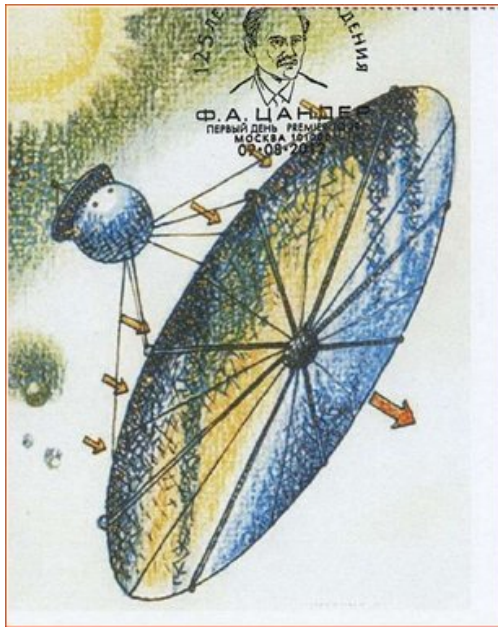
AMCM-2026, 17–21 august 2026

Solar Sail



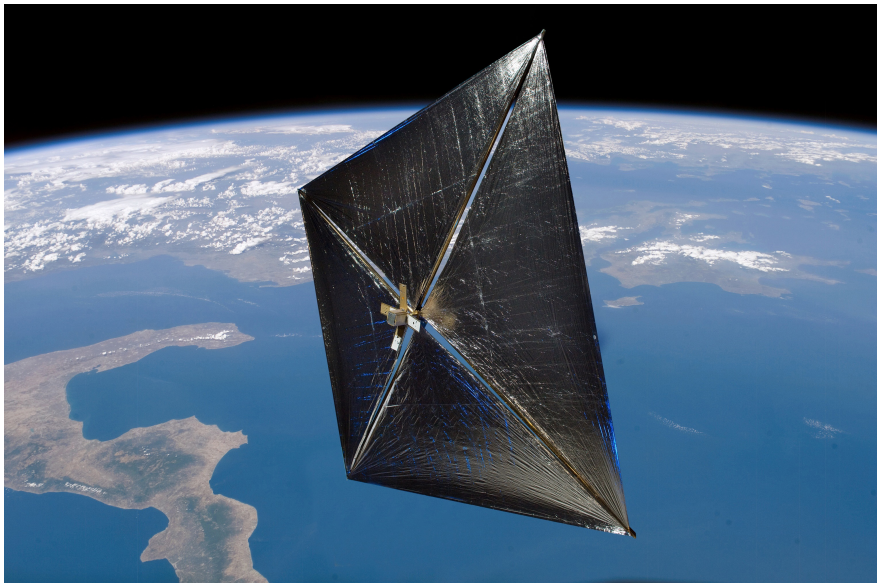
Project image of Satellite NanoSail-D2 NASA (S 10 m^2). Start 19.11.2010.

F. A. Zander



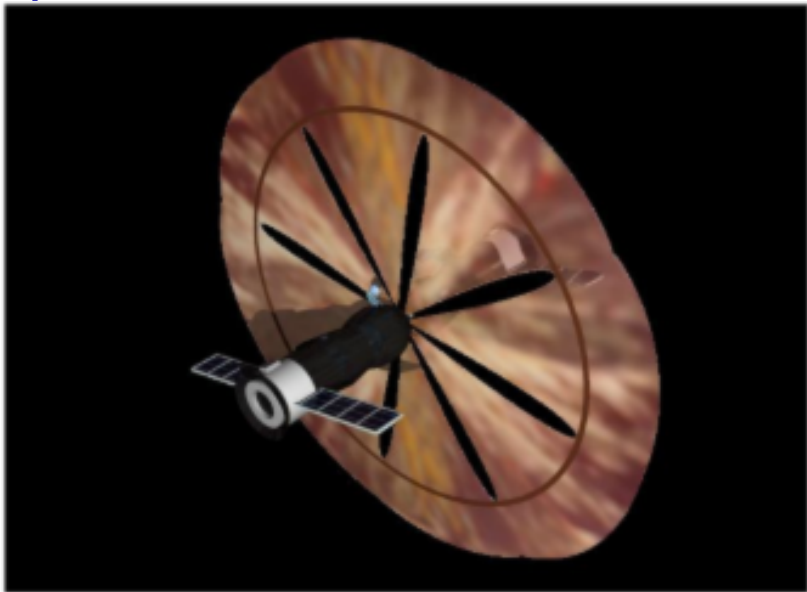
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NanoSail-D2 NASA



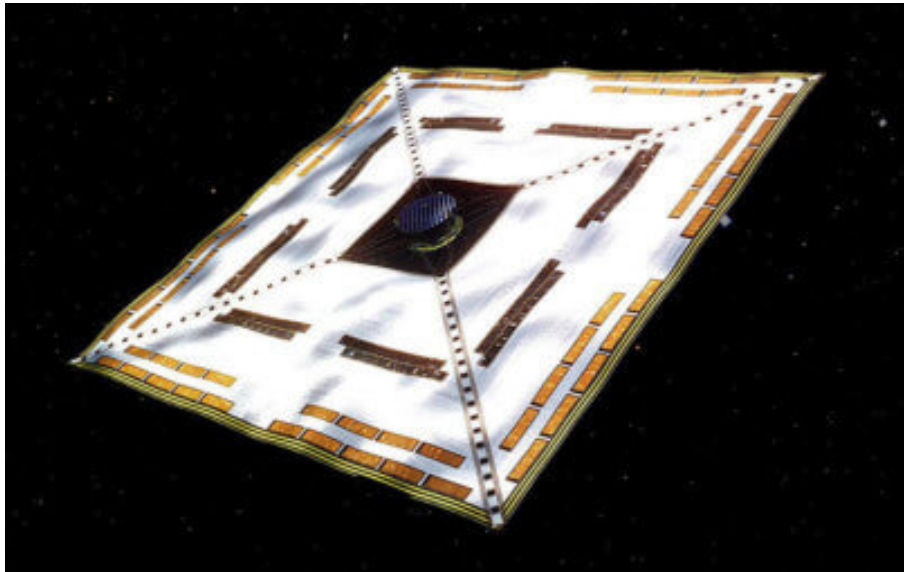
Deployment of NanoSail-D2 NASA ($\approx 10 \text{ m}^2$).

Znamya-2

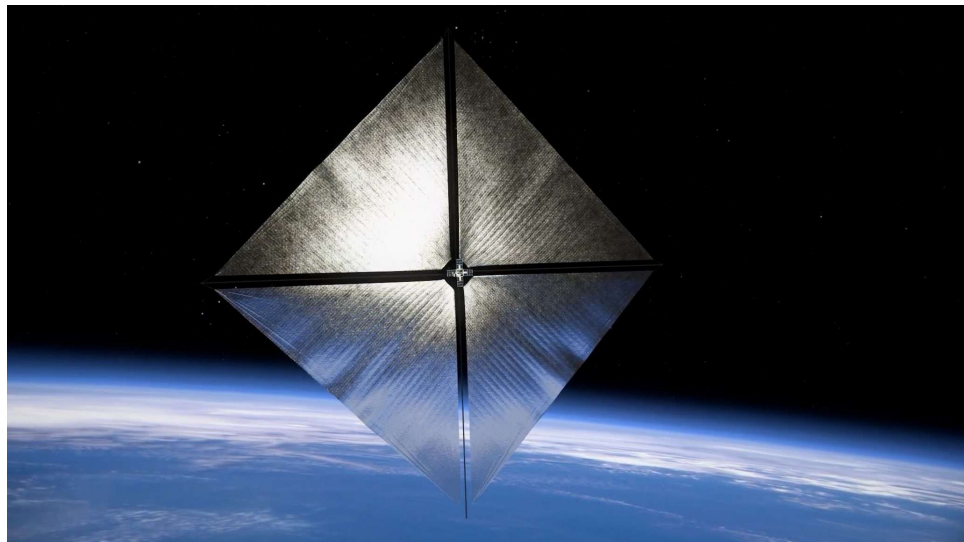


Start of russian reflector-sail "Znamya-2" 27.10.1992.

IKAROS

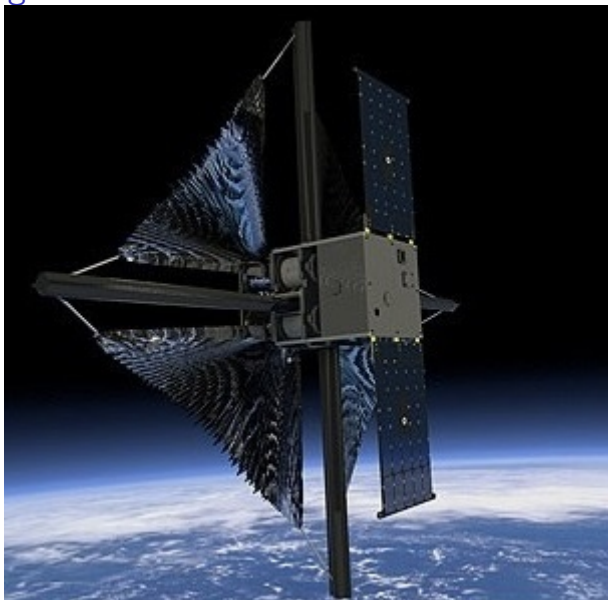


IKAROS (Interplanetary Kite-craft Accelerated by Radiation Of the Sun),
JAXA (Japan). Start 20.05.2010, (S 200 m^2).



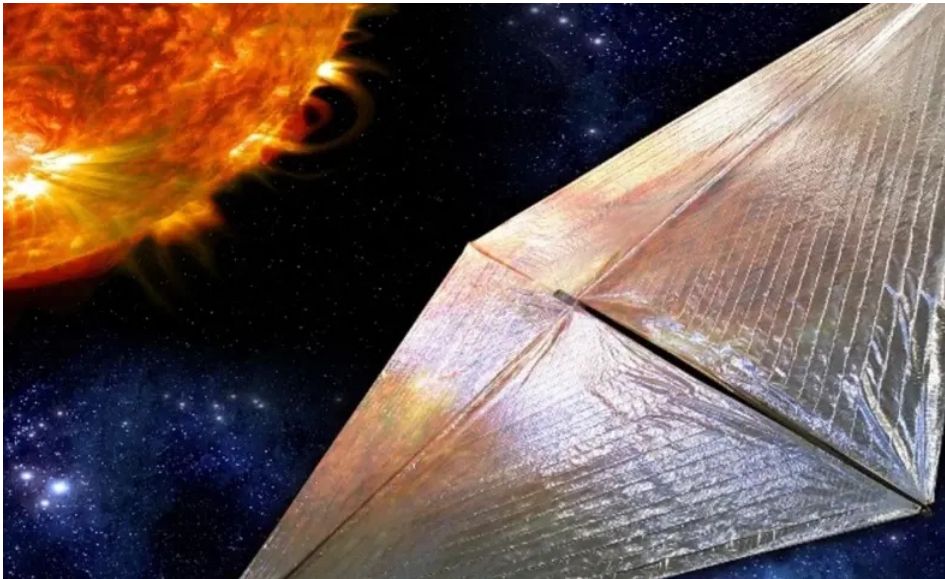
ACS3 (Advanced Composite Solar Sail System) NASA. Start 23.04.2024 (S 80 m^2)

ACS3 Design



ACS3 (Advanced Composite Solar Sail System) NASA is deployed in August 2024

Solar Cruiser



Project Solar Cruiser NASA for the Sun researches in 2023 (not realized)
($40 \times 40 \text{ m}$).

Parker Solar Probe



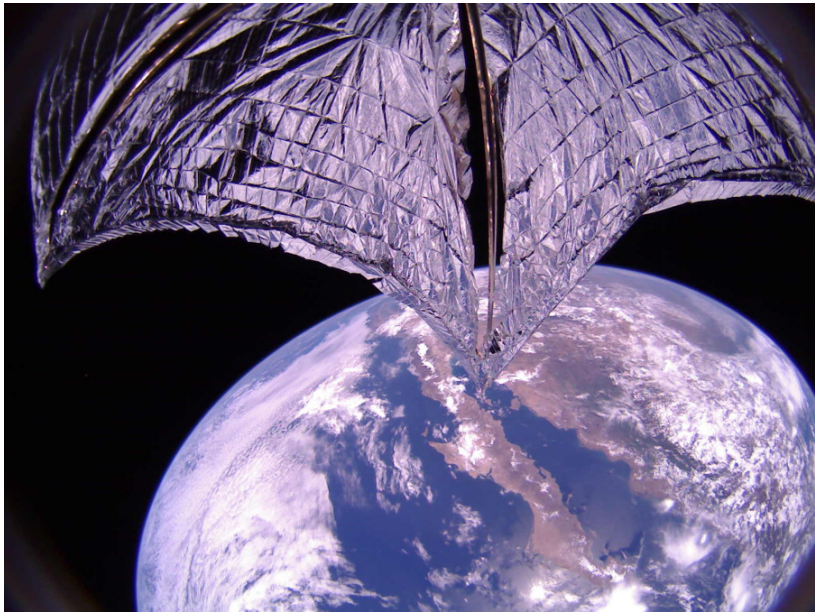
Parker Solar probe NASA/ Start 12.08.2018–2024.

Count Dooku's solar sailer



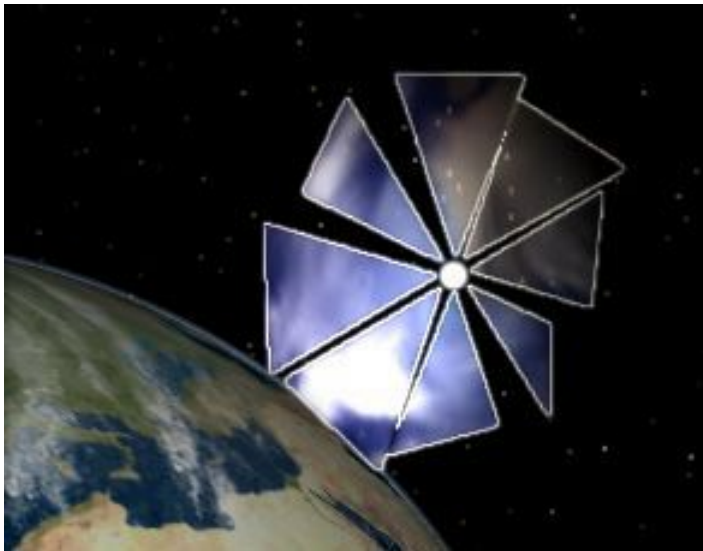
Science fiction image for the book "Star wars".

LightSail 2



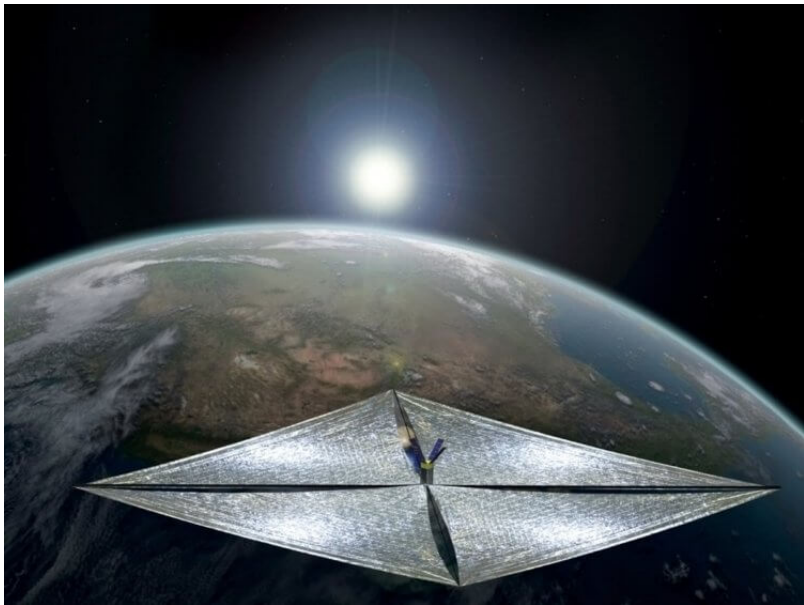
Start Light Sail 2 25.06.2019. Planetary society USA.

Kosmos 1



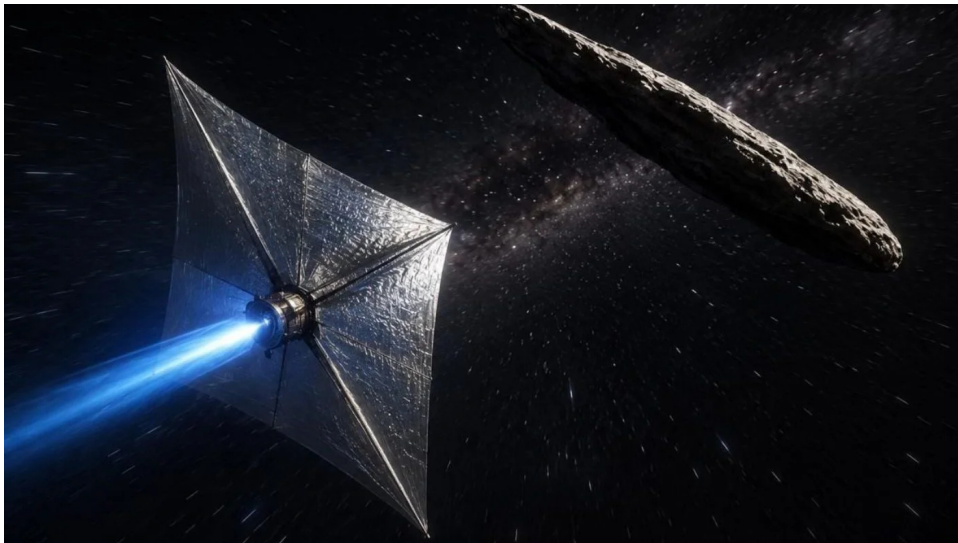
Common project "Kosmos-1". Start 21.06.2005, not realized
(8 blades triangular, $S\ 600\ m^2$).

LightSail 2



Light Sail 2 (see above) is deployed 23.07.2019–17.11.2022 ($S \ 32 \text{ m}^2$).

Solar Sail Flotilla



MFTI and IPM Spacecraft optimal control for rendezvous
with an interstellar object using solar sail

THANKS!!!

Е. Н. Поляхова

КОСМИЧЕСКИЙ ПОЛЕТ С СОЛНЕЧНЫМ ПАРУСОМ



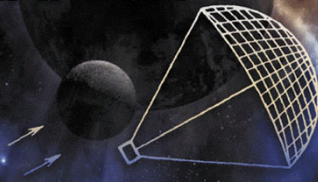
Е. Н. Поляхова

КОСМИЧЕСКИЙ ПОЛЕТ С СОЛНЕЧНЫМ ПАРУСОМ



Е. Н. Поляхова

ВВЕДЕНИЕ В ТЕОРИЮ СОЛНЕЧНОГО ПАРУСА



Космоплавание
под солнечным парусом —
фантастика или реальность
перспектив недалекого
будущего?

