How to Assess the PRC’s Crewed Mars Mission Timeline

https://www.airuniversity.af.edu/CASI/Space/
https://www.airuniversity.af.edu/CASI/Contact-Us/

Kristin Burke
Checklist

- Past National or Agency Plan
- Authoritative Statement of Ambition
- Background? Retired?
- What is the mode of broadcast? Has it been in Chinese media?
Lessons Learned From Crewed Lunar Mission Statements

China Academy of Sciences
- In 2009 said “around 2030”

Long Lehao
Retired CALT
- In 2010 said "technically possible for 2025."
- July 2022 in People's Daily said “hopes for crewed landing in 2030.”

Ye Peijian
Retired CASC
- In 2010 said 2025
- In 2021 said “entirely possible by 2030.”

Maj Gen Yang Liwei
Deputy Director CMSE
- In 2016 said “no plan but he'd like to go.”
- In 2017 said “experts are discussing around 2035.”
Thinking About Crewed Mars Mission Timeline

UNOOSA May and June 2023

UNOOSA January 2024
Checklist

- Past National or Agency Plan
- Authoritative Statement of Ambition
- Background? Retired?
- What is the mode of broadcast? Has it been in Chinese media?

Foundational Knowledge

Questions to answer
Thinking About Crewed Mars Mission Timeline

“Manned lunar landing around 2030”

“Manned Mars exploration around 2050”

Fig. 0.1 China’s roadmap for space science, applications and technology to 2050
Thinking About Crewed Mars Mission Timeline

**Rocket SOE**

Long Lehao
- In June 2021 said “Currently no plan to land crew on Mars” in Xinhua

Wang Xiaojun
Former CALT
- In 2020 and June 2021 said “Possible departure times starting in 2033, 2035, etc.”

**Basic/Applied Science & SOE**

China Academy of Sciences
- In 2009 said “around 2050”

Ye Peijian
- In 2015 said “Earliest 2035” on CNSA website

**China Manned Space Engineering (CMSE)**

Maj Gen Yang Liwei
- In 2022 said “There will be crewed exploration of Mars” in People’s Daily

Zhou Jianping
Chief Designer of CMSE
- In 2021 and 2022 said “We will aim for Mars” on CMSE website
Who To Watch in CMSE and SOEs

China Manned Space Engineering

Maj Gen Yang Liwei
-In 2022 said “there will be crewed exploration of Mars” in People’s Daily

Zhou Jianping
-In 2021 and 2022 said “we will aim for Mars” on CMSE website

Yue Wang
CMSE Training Center

State Owned Enterprises

Long Lehao
-In June 2021 said “currently no plan to land crew on Mars” in Xinhua

Zhang Zhi
CALT
LM-10

Yi Yi
CALT
LM-2F

Yang Lei
CAST crewed lunar landing system
Further Reading

Selected Publications:

Counterspace
1. PLA Counterspace Command and Control 12.2023
2. Is Military Space-Based Jamming Normal? Some Worry It Is. 11.2023
3. The PLA’s New Base for Space Situational Awareness—Opportunities and Challenges for the U.S. 9.2023

Space Exploration
1. Trends That Impact Perceptions of the Chinese Space Program 8.2023
2. Understanding China's Space Leading Small Groups (LSGs)--The Best Way to Determine the PLA's Influence 9.2022

Cislunar
1. China's Space Situational Awareness Capabilities for Orbits Beyond GEO 9.2022
2. Chinese Military Thinking on Orbits Beyond GEO 9.2022
3. What is China doing at the lunar distant retrograde orbit? 4.2022

Space Systems Analysis
1. PLA On-Orbit Satellite Logistics 3.2024
2. Initial Analysis of Two Chinese Satellite Series: Shi Jian and Shi Yan 3.2022