



This is the farthest humans have ventured into space.

238,900 miles (to scale)







Figure 2-1.- Lunar surface configuration of the extravehicular mobility unit.

But let us remember that in spite of the risks associated with the Apollo programs, and even the programs before that, we did what had to be done. When the first humans left the Earth for space, risk was overcome by accepting it.

Circumnavigating our planet. That too was risky.

So was settling "The New World," which is anything but new today. Too much risk awareness makes us apathetic, makes us afraid, keeps us here, tethered. The astronauts and cosmonauts knew the risks involved because they knew that they were the first of their kind to take the plunge in spite of the odds.

ASTRONAUT FATALITIES DURING SPACEFLIGHT

Vladimir Komarov

24 April, 1967

Soyuz 1 - Parachute Failure

Georgi Dobrovolski

30 June. 1971

Soyuz 11 - Decompression

Viktor Patsayev

30 June. 1971

Soyuz 11 - Decompression

Greg Jarvis

28 January, 1986

Challenger - Vehicle disintegration during launch

Christa McAuliffe

28 January, 1986

Challenger - Vehicle disintegration during launch

Ronald McNair

28 January, 1986

Challenger - Vehicle disintegration during launch

Judith Resnik

28 January, 1986

Challenger - Vehicle disintegration during launch

Michael J. Smith

28 January, 1986

Challenger - Vehicle disintegration during launch

Dick Scobee

28 January, 1986

Challenger - Vehicle disintegration during launch

William McCool

1 February, 2003

Columbia – Vehicle disintegration during launch

Michael P. Anderson

1 February, 2003

Columbia - Vehicle disintegration during launch

David M. Brown

1 February, 2003

Columbia - Vehicle disintegration during launch

Ilan Ramon

1 February, 2003

Columbia - Vehicle disintegration during launch

Michael J. Adams

24 April, 1967

X-15 Flight 3-65-97 - Control Failure.

Valentin Bondarenko

3 March, 1961

Fire in altitude chamber

"...The conquest of space is worth the risk of life."

Vladislav Volkov

30 June, 1971

Soyuz 11 - Decompression

Theodore Freeman

31 October, 1964

Training jet crash

Elliot See

28 February, 1966 Gemini 9 - Training jet crash Ellison Onizuka 28 January, 1986

Challenger - Vehicle disintegration during launch

Charles Bassett

28 February, 1966

Gemini 9 - Training jet crash

Virgil ìGusî Grissom

27 January, 1967

Apollo 1 - Fire during spacecraft test

Rick D. Husband

1 February, 2003

Columbia - Vehicle disintegration during launch

Edward H. White

27 January, 1967

Apollo 1 - Fire during spacecraft test

Roger Chaffee

27 January, 1967

Apollo 1 - Fire during spacecraft test

Laurel B. Clark

1 February, 2003

Columbia - Vehicle disintegration during launch

Clifton C. Williams

5 October, 1967

Training jet crash

Robert Lawrence

8 December, 1967

Training jet crash

Yuri Gagarin

27 March 1968

Soyuz 3 - Training jet crash

Sergei Vozovikov

11 July, 1993

Drowned during water recovery training



But above this, they saw what none of us saw.

We can't experience what they experienced. All we have is pictures to look at, images showing us how big the universe is. We don't have a sense of its distance because a picture looks two-dimensional. We cannot extend our arms outward and realize that we're just a fraction of a thing of another greater thing.

There is something great to be had in the great beyond. And so few of us know, truly know, what's out there that's so great.