NOTES: Why Mars? Why Now? Program

WINWORD\MARS\NOTES-WhyMars-SuggestedScript



Today we're going to talk about what was, until recently, one of the greatest mysteries in the night sky...the Red Planet Mars. You know... the rock next door.

Actually, Mars has not received the credit it deserves. Why? Because of the books that have been written and the movies that have been

made about aliens and the little green men.



From War of the Worlds, Mars Attacks, Devil Girl From Mars, Invasion of the Saucer-Men, the planet Mars has held a grip on our imagination for a long time. But where did these early **dark** ideas come from about vast networks of canals and advanced, and sometimes



hostile, civilizations?

Most have led to false information and misunderstandings.

Even the original classic movie of 1951, The Day The Earth Stood Still **POSTER** depicts fear, but in reality, it has a message that is so powerful that it needs to be seen by everyone, even today.



"Join us and live in peace or continue on your present course and face obliteration. The choice is yours."

My purpose today is to dispel some of those rumors & myths and bring clarity to a companion of valor that will help guide us in building an enlightened and harmonious future on Earth and beyond. **PAUSE**

Here's a question for you...

Have you ever looked up into the night sky and wondered, "When will we set foot on another planet?"

Yes, we've gone to the Moon and brought back Moon dust and rocks, but I'm talking about setting foot on another planet in our solar system.

• You may be as surprised as I was to learn that the plan is for humans to set foot on Mars in just... 5 years.

• Speaking of looking up into the night sky, when standing on Mars looking up at the night sky, you will see the same star constellations as you do on Earth...the Big Dipper, Orion, you'll see Pleiades (7 Sisters). Why? Because Mars is relativity close to Earth.

• Also...Phobos, the larger moon of Mars, is going to crash into Mars and rip it apart...in about 30 to 50 million years.

MORE OPTIONS:

• And...We have already collected Mars rocks and analyzed them on Earth.

Other topics that will prompt the question, WHY, and all have astounding logical answers:

• When you get up in the morning and look into the mirror, you are looking at one of the most endangered species on our planet.

• Elon Musk of SpaceX & TESLA is putting the finishing touches on the million-mile battery... GO ELON

• **OK**, **one more**... Japanese billionaire Yusaku Maezawa and Elon Musk have partnered with the **dearMoon Project** to send the first crew of **the SpaceX Starship** to loop the Moon in 2023.

The crew will consist of 13 diverse civilians.

Yeah... there's a lot happening out there! Let's step back for a moment.

On February 6th, 2018, SpaceX launched the first launch & return test of the Falcon 9 Heavy rocket for the future Mars and Moon missions. (If you do not show the video, use the Falcon 9 successful launch as a talking point. Some of the script will work well without video.)





(Optional slide of Falcon 9 landing if no video is played.) Here's a 2 minute, action-packed VIDEO that encapsulates the highlights of that day:

David Bowie: <u>https://youtu.be/A0FZIwabctw</u> (Time: 1:56)

OPTION: Show the video or just the slides. By the way, the Tesla sports car that you saw was sent into space because a payload needed for ballast, (weight & balance). Elon Musk offered this payload space, a \$90M gift to NASA, but they declined for good reasons, so Elon used his RED sports car as ballast and put it into Mars orbit around the sun where it now gently rests for the next

billion years or so. Great Advertising... The serendipity of it all.

So, the questions are often asked... "Why are we even going to Mars?" How can we create a new civilization that will function HARMONIOUSLY? If we want to form a functioning civilization out there, how is it built? History tells us that a solid society is built on Respect, Ethics, Diversity and Trust.

So, when are these traits formed? You ask any psychologist or psychiatrist and they will tell you that a person's beliefs and values are formed by the age of 6 to 8 years.

TELL YOUR MOTHER... Ron Fronk story (in video...adapt to fit your situation if you wish.) "Of course, that was a joke that Ron later shared with his son. Even though the teller had not given Ron an extra \$100, Jason remembers the incident to this day. Why? Because Ron knew that emotional experiences, whether happy, sad, fearful or humorous, lock into our minds forever. Prove it to yourself by calling to mind some of the memories in your life. The prominent ones are most likely emotional."

We need to realize that many adults today are functioning on beliefs they formed as a child!

So, all that being said, what does that have to do with Mars? We need to face the music. We are going to Mars. We are going soon. And we need to put the pieces in place to allow that to happen judiciously.

Alright, here are some interesting facts about Mars:

SLIDE: Mars FACTS



• Mars is about half the size of Earth. In fact,

Mars has a land surface area equal in size to all of the continents on Earth COMBINED. Why? Because there is no surface water on Mars.

- One year on Mars is 687 Earth days.
- One day on Mars, called a "sol" which is about 24 hrs. and 39 min.
- Mars is about one-third the gravity of Earth.

• The average temperature on Mars is -81° F. That's a little misleading because the temperature ranges from -240° F on winter to 70° F at the equator during the summer.

Also, the orbit of Mars around the sun is elliptical and each season is about twice as long as Earth's.

• Contrary to popular belief, there is water on Mars. In September of 2019, a liquid-water underground lake was discovered.

Also, Mars has ice glaciers underground estimated at about 3 million cubic kilometers. That's a huge amount of water. The entire fresh water supply on Earth is only about 30 million cubic kilometers.

• Mars has two Moons: Dimos & Phobos. Probably spinoffs from the asteroid belt between Mars and Jupiter.

• **Olympus Mons** is about 3 times higher than Mount Everest and it is about as wide as the state of Texas. As far as we know, it's the largest volcano in our solar system.

LET'S FACE IT, we're going to Mars... and we're going soon. But who will be going to start this new society?

OPTION: If you are speaking to Rotary: "Hey, that's easy. Send Rotarians who have passed the 4-Way Test." Dr. Robert Zubrin, founder of the Mars Society said, "The time has come for humanity to journey to Mars. Though Mars is distant, we are far better prepared today to send humans to Mars than we were to **travel** to the Moon at the commencement of the space age." WHEN WAS THAT?

When did the space age begin? 1957. Why? Sputnik

In 1957, Sputnik sent a Shock Wave around the world. We wanted to go to the Moon...we wanted space superiority, but what really got us off the launch pad was when Russia sent that little 23" sphere into orbit around the Earth.

Thank goodness for that good old USA INGENITY. In going to the Moon, the leadership got it!

SLIDE: KENNEDY – May 25, 1961,



Video link: <u>https://youtu.be/RSA9AqStuMU</u>

"I believe this nation should commit itself..." Then on July 20th 1969, Neil Armstrong said with a lot more composure than I would have had, "Houston,

Tranquility Base here. The Eagle has landed."

Ladies and gentlemen, those were not words. That was a vision. And when you capture a vision for your **personal life**, your **business**...your **community**, your **nation**, people will rally behind you to the ends of the earth and beyond to help you reach your dream. **It has been proven**. But if you don't have a dream, people will continue to meander on through your path preventing you from reaching any end whatsoever.

Now, because of who you are, you probably caught the secret that JFK revealed in his words. It is one of the most powerful secrets of leadership. And he used it in his statement.

This leadership secret is so powerful... that JFK's vision was realized even though he had died 6 years before its completion. What is it?

SLIDE: LEADERSHIP SECRET

Dr. Robert Zubrin

Enter Dr. Robert Zubrin, Author, President and Founder of **The Mars Society** and **THE** most profound authority of the planet Mars in our world today. His books, *The Case for Mars* and *The Case for Space* are practical handbooks that lay out a path for *Humans to Mars*. **So why are we going to Mars? TO BE CLEAR**, we are not going to **SIMPLY LEAVE EARTH**. We are going for **HUMANITY & DISCOVERY**. We have been prompted by so many of our noted scientists and scholars.

SLIDE: Stephen HAWKING Quote



"We must continue to go into space for the future of humanity. I don't think we will survive another one-hundred years without escaping beyond our fragile planet."



Elon Musk quote



Back in 1998, Dr. Zubrin formed The Mars Society which identifies seven powerful reasons why we must go to Mars. The first of the seven Founding Declarations states:

"We must go for the knowledge of Mars. Our robotic probes have revealed..." (See beginning of Manual for complete declarations.) Mars Declaration #1

...actually, going to Mars is nothing new. We've been there before...many times. **Not to be too confident**, but we're actually getting pretty good at it... as you may know by the recent landing of the Perseverance Rover, in Jezero Crater on Feb 18th.

As I said... going to Mars is nothing new. **But, sending rovers to Mars** is one thing. Sending humans to Mars **to establish a human settlement** is an entirely different thing.

If a logical sequence is followed, it will most likely be successful.

BUT, sometimes a seemly logical sequence isn't followed:

How is it that we put men on the moon before we figured out it would be a good idea to put wheels on luggage? And yet, that is exactly the sequence that followed.



SLIDE ALEX: Here's someone you should know. The 2020 Rover WAS named *Perseverance* by Alex Mather, a Northern Virginia seventh-grader who won a national contest with 28k entries.

We're finally getting our young people involved.

After all, they are the people who will be going to and settling Mars and creating a new society for humanity.

SLIDE of sunset on Mars by Opportunity Rover.



SLIDE: Mars 1937 photo. This is the best photo we had of Mars in 1937 along with a quote by Plato about 2500 years ago. **"Astronomy compels the soul to look upward and leads us from this world to another."** Could he have been talking about Mars?

Other images of Mars. Canals on Mars...erroneously translated. Giovanni Schiaparelli (1835-1910), Italian astronomer. He named the lines on Mars as **"canali"** meaning caused by weather and erosion. The Italian word **canali** was translated from Italian to English as, **canals**, meaning created intelligent beings. Thus the misdirected meaning leading to intelligent life on Mars.

So, Why Mars? Why Now?

SPINOFF TECHNOLOGY. Refer to Spinoff Technology Sheet below.



SLIDE: MUSK DATE – June 28th.

Jane 28, 1971

What happened on this date? Elon Musk was born.

SLIDE MUSK IMAGE



- You may know Musk created **PayPal**, **Tesla** and **SpaceX**. Boring Company / NeuraLink / Starlink...
- So...1971...he's only about 50 years of age.
- How could he be a multi-billionaire?
- I guess it doesn't have much to do with age / money.
- But what it does have to do with is vision and leadership.
- Great companies know exactly where they are going!

Last sentence in the Mission Statement of SpaceX is: <u>To enable a self-sustaining human civilization on Mars.</u> Musk says **clearly** that **colonizing Mars is why he formed SpaceX.**

SLIDE STARSHIP IMAGE – what a beautiful ship.



Look at the beauty of that piece of science and technology. How would you like to take that puppy out for a spin around the block?

We are living in an extraordinary moment in history...

Science and technology have created another form of art in our lives... (see video for text). Who will lead us in this new era? The answer may surprise you.

To be recognized as a leader today... (see video for text)

So, who will lead us in the new era?

YOU are the people who will lead us in this new frontier. You are leading by example. You are taking an interest in our future.



Let me tie this together with Carl Sagan, astronomer and creator of the PBS Cosmos series. SLIDE Sagan: Video link if needed: https://youtu.be/fmMvRpdOuX0

This is part of the **message by Carl** that was sent to Mars on the Phoenix

Lander in 2008... and now awaits being heard by future astronauts.

SLIDE Sagan Quote:



If not playing the video, READ MESSAGE

In closing, let me say that we are about to embark on the greatest human endeavor in the history of our civilization.

As I mentioned earlier, in just a few years, humans will set foot on Mars

to begin settling the Red Planet, <u>at which time, we will become a **multi-planet species**</u>... an <u>achievement</u> never before realized.

We are living in a time unlike any time before **THAT** is making its mark on history... for ETERNITY.

The hour is late. The stakes could not be higher. The project could not be harder, But the payoff could not be greater. We're going to Mars to create a new world!



SLIDE: Melton Info. (Substitute your own information here.) You can find more on how the new-world culture and society will evolve in my book: RED PLANET LEADERSHIP Website: www.jamesmelton.com

SLIDE Mars Society:



Consider this: There are only three kinds of people: Those who **MAKE** things happen. Those who **WATCH** things happen. And there will always be those who **WONDER**—what happened?

If you are one who makes things happen, open the door to this new frontier and help lift the awareness to build a future that is better than today.

The mission of The Mars Society is to educate and raise the level of awareness of this most important journey.

Join us and be someone who MAKES things happen.

Become a member of the Mars Society. You can do that easily by going to: www.MarsSociety.org and click on **JOIN**. Together **we make** a difference.

Thanks for tuning in.



Thanks for being here today.

- Question & Answer session if appropriate.
- Total presentation time about 25 minutes plus Q&A.

SPINOFF TECHNOLOGY SHEET: (Use whatever examples that work for you.)

Often people don't connect the new frontier of scientific research with how that's going to transform their lives in the future.

We hear people say, "Why are we spending money on going to the Moon and Mars when we have so many problems right here on Earth?"

Forgive me, if I do say so myself, "That lack of vision **is so short sighted** that it could be the demise of our very existence."

What if...**Satellite TV**, Memory Foam, **Ear Thermometers**, Invisible braces, **Enriched baby food**, Scratch Resistant Lenses, Cordless Tools, **Water Purification**, Airplane Wing Designs, Truck aerodynamics...to name just a few.

- Hydrogen/Oxygen rocket engines
 - Multi stage heavy-lift launch vehicles
- Space rendezvous technology

- Deep space navigation & communication
 - In-space life support
- the ability to soft land on the moon
 - o Radio isotope thermal electric generators
- Space suits

OK, I hear you...let's bring it HOME. How about: Computers enhancements / iPods / iPhones / 3-D Food printing Silicon chips / Cells phones / Air-scrubbers / Freeze drying New treatments for osteoporosis

AND, if it's **cordless**, **fireproof**, **lightweight**, **strong**, **miniaturized**, or **automated**... **NASA** probably had a hand in it.

We are talking:

Trash compactors / Bulletproof vests / Solar panels / Artificial limbs / / Implantable heart monitors / High-speed wireless data transfer / / Cordless power tools / Fire-fighters' masks / Computerized insulin pumps / / And GPS technology / FSD, (Full self-driving vehicles) NEED I GO ON? The new Mars spinoff benefits will be self-evident...sooner rather than later.

ADDITIONAL INFORMATION

Some answers to, "Why are we even going to Mars?"

Internet:

Starlink, 1,600 plus satellites circling the Earth now in Earth orbit 550km/340miles. Goal 42,000 satellites. High-speed, broadband, hand-held, fully functioning internet any time anywhere on our planet. (Instant hand-held, personal, worldwide, video communication.)

Medical:

Hospitals – Have you ever been in a hospital? Have you ever sees an active operating Emergency Room and surgical facility? Just about every switch and machine you see is a result of space-spinoff technology.

Had we not gone to the Moon, had we not looked toward the future, we would probably not have this life-saving technology to benefit us today.

Pacemaker – Velcro –

Boring Company:

Why are we doing that? Under Dodger Stadium. Under LAX. Under the Las Vegas strip. No, it's to provide underground space on Mars and to mine asteroids.

Full Self-driving Cars:

Did you know that full self-driving vehicles are being designed that will make driving a car 90+% safer than non-self-driving vehicles. This technology that uses GPS (Global Positioning System) and satellite communication is benefitting us right now. AND this technology is a direct result of space spin-off innovations.

The technology originated when the need for parking vehicles with no drivers arose. We needed to find a way to place a vehicle on top of a rocket, send it into space on a 7 month voyage and land it on a pre-determined spot in a parking lot 200 million miles away.

Maybe you won't live there and maybe you will, but we can enjoy the benefits here and now. We are benefitting now from the techniques that we are designing for our future in space. Think of what lies ahead of us.

Are Tang, Teflon and Velcro NASA spinoffs?

Tang, Teflon and Velcro are not spinoffs of the Space Program.

TANG: General Foods developed Tang in 1957 and it has been on supermarket shelves since 1959. In 1962, when astronaut John Glenn performed eating experiments in orbit, Tang was selected for the menu, launching the performed eating experiments in orbit. Tang was selected for the menu, launching the powdered drink's heightened public awareness.

TEFLON: NASA also raised the celebrity status of Teflon, a material invented for DuPont in 1938, when the Agency applied it to heat shields, space suits and cargo-hold liners. **VELCRO:** Velcro was used during the Apollo missions to anchor equipment for the astronauts' convenience in zero gravity situations. Although it is a Swiss invention from the 1940s, because of its general use in space, it has since been associated with the Space Program.