Perseverance Pays When it Comes to Landing on Mars

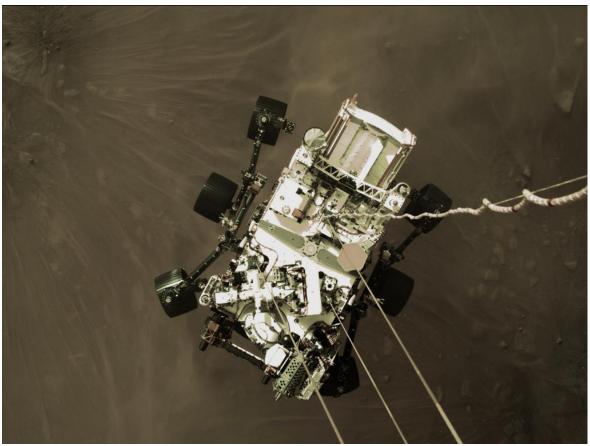


Image Credit: NASA, JPL, Mars 2020

Slung beneath its rocket powered descent stage Perseverance hangs only a few meters above the Martian surface, captured here moments before its February 18 touchdown on the Red Planet. The breathtaking view followed an intense seven minute trip from the top of the Martian atmosphere.

Part of a high resolution video, the picture was taken from the descent stage itself during the final skycrane landing maneuver. Three taut mechanical cables about 7 meters long are visible lowering Perseverance, along with an electrical umbilical connection feeding signals (like this image), to a computer on board the car-sized rover.

Below Perseverance streamers of Martian dust are kicked-up from the surface by the descent rocket engines. Immediately after touchdown, the cables were released allowing the descent stage to fly to a safe distance before exhausting its fuel as planned.

NASA's Mars 2020 Perseverance Rover Landing Animations



https://www.youtube.com/watch?v=rzmd7RouGrM

This reel depicts key events during entry, descent, and landing that will occur when NASA's Perseverance rover lands on Mars February 18, 2021. In the span of about seven minutes, the spacecraft slows down from about 12,100 mph (19,500 kph) at the top of the Martian atmosphere to about 2 mph (3 kph) at touchdown in an area called Jezero Crater.

Perseverance will seek signs of ancient microbial life on Mars, collect and cache Martian rock and regolith (broken rock and dust), characterize the planet's geology and climate, and pave the way for human exploration of the Red Planet.

For more animations and video of the NASA's Mars 2020 Perseverance rover go to https://vimeo.com/420043274

For more information about Perseverance, visit https://mars.nasa.gov/perseverance Credit: NASA/JPL-Caltech

Footballisms...

"Gentlemen, it is better to have died a small boy than to fumble the football"....

John Heisman, first football coach at Rice

"I make my practices real hard because if a player is a quitter, I want him to quit in practice, not in a game."

Bear Bryant / Alabama

- " It isn't necessary to see a good tackle, you can hear it!"
- -- Knute Rockne / Notre Dame

"At Georgia Southern, we don't cheat.

That costs money, and we don't have any."

- Erik Russell / Georgia Southern

"The man who complains about the way the ball bounces is likely to be the one who dropped it."

--Lou Holtz / Arkansas - Notre Dame

"When you win, nothing hurts."

- Joe Namath / Alabama

"A school without football is in danger of deteriorating into a medieval study hall."

--Frank Leahy / Notre Dame

"There's nothing that cleanses your soul like getting the hell kicked out of vou."

--Woody Hayes / Ohio State

"I don't expect to win enough games to be put on NCAA probation I just want to win enough to warrant an investigation."

--Bob Devaney / Nebraska

"In Alabama, an atheist is someone who doesn't believe in Bear Bryant."
--Wally Butts / Georgia

"I never graduated from Iowa. But I was only there for two terms - Truman's and Eisenhower's."

-Alex Karras / Iowa

"My advice to defensive players is to take the shortest route to the ball, and arrive in a bad humor."

--Bowden Wyatt / Tennessee

"I could have been a Rhodes Scholar except for my grades."

-- Duffy Daugherty / Michigan State

- " Always remember Goliath was a 40-point favorite over David."
- --Shug Jordan / Auburn

"I asked Darrell Royal, the coach of the Texas Longhorns, why he didn't

recruit me "He said, "Well, Walt, we took a look at you, and you weren't any good."

--Walt Garrison / Oklahoma State/Dallas Cowboys

"Son, you've got a good engine, but your hands aren't on the steering wheel."

--Bobby Bowden / Florida State

"Football is NOT a contact sport, it is a collision sport."

Dancing IS a contact sport."

-- Duffy Daugherty / Michigan State

After USC lost 51-0 to Notre Dame, his post-game message to his team was; "All those who need showers, take them."

--John McKay / USC

" If lessons are learned in defeat, our team is getting a great education."

--Murray Warmath / Minnesota

"The only qualifications for a lineman are to be big and dumb.

To be a back, you only have to be dumb."

--Knute Rockne / Notre Dame

"We live one day at a time and scratch where it itches."

-- Darrell Royal / Texas

"We didn't tackle well today, but we made up for it by not blocking."

--John McKay / USC

"I've found that prayers work best when you have big players."

--Knute Rockne / Notre Dame

"He doesn't know the meaning of the word fear. In fact, I just saw his grades and he doesn't know the meaning of a lot of words."

Ohio State's Urban Meyer on one of his players:

Why do Auburn fans wear orange?

So they can dress that way for the game on Saturday, go hunting on Sunday, and pick up trash on Monday.

What does the average Alabama player get on his SATs? **Drool.**

How many Michigan State freshmen football players does it take to change a

light bulb? None. That's a sophomore course.

How did the Auburn football player die from drinking milk? The cow fell on him.

Two Texas A&M football players were walking in the woods. One of them said, "Look, a dead bird."

The other looked up in the sky and said, "Where?"

What do you say to a Florida State University football player dressed in a three-piece suit?

"Will the defendant please rise."

How can you tell if a Clemson football player has a girlfriend? There's tobacco juice on both sides of the pickup truck.

What do you get when you put 32 Arkansas cheerleaders in one room? A full set of teeth.

University of Michigan Coach Jim Harbaugh is only going to dress half of his players for the game this week . The other half will have to dress themselves.

How is the Kansas football team like an opossum? They play dead at home and get killed on the road.

How do you get a former University of Miami football player off your porch? Pay him for the pizza.

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Blue Angel F-18C Walkaround



https://youtu.be/-w7oc0LczBE

The post *This Is The Most Detailed Walkaround Tour Of A Blue Angels F/A-18C Hornet We've Ever Seen* appeared first on <u>The Aviationist</u>.

Pandemic Poetry in Homage to T.S. Eliot's J.A.Prufrock

I grow old I grow old I shall wear the bottoms of my skinny jeans rolled

Shall I part my hair on the side? What is an emoji peach? I shall wear pj pants, while I zoom kindergarten teach I have heard the tiktoks singing, each to each I do not think that they will sing to me.

For I have known them all already, known them all Have known the WebEx, Zoom and Google Meets I have measured out my life in sharing Tweets Beneath the sound of toddlers from a farther room. So, how should I presume?

I have thought them riding lungward on the breath Slipped between mask fibers o'er the face When their coughs blow the virus black and grey. We have lingered in the chambers of our homes With maddened eyes playing games on phones Til Dr. Fauci vaxes us and we live (again).

Oh, do not ask, "Is it systemic?" Let's not go--it's a pandemic. And indeed there will be time
For the barbecue smoke that slides along the street,
Rubbing its back upon the window-panes;
There will be time, there will be time
To prepare an unmasked face to meet the faces that you meet

[Tip of the hat to @khrunde]

Emergency Medical Equipment Rapid Delivery By Drone



https://www.youtube.com/watch?v=y-rEI4bezWc

Each year nearly a million people in Europe suffer from a cardiac arrest. A mere 8% survives due to slow response times of emergency services. The ambulance-drone is capable of saving lives with an integrated defibrillator. The goal is to improve existing emergency infrastructure with a network of drones. This new type of drones can go over 100 km/h and reaches its destination within 1 minute, which increases chance of survival from 8% to 80%! This drone folds up and becomes a toolbox for all kind of emergency supplies. Future implementations will also serve other use cases such as drowning, diabetes, respiratory issues and traumas.

[Corrective Statement to the video: One should never leave the patient alone and always start performing CPR first. Please send out a bystander to retrieve an AED or Ambulance Drone in case of Cardiac Arrest.]

Cool Change Little River Band



https://www.youtube.com/watch?v=9bKwRW0l-Qk&t=18s

The Eagles founding member, the late Glenn Frey, knew what he was saying when he dubbed Little River Band "the best singing band in the world." The current lineup of LRB takes that accolade to heart each and every time they perform.

Through the '70's and '80's, LRB enjoyed huge chart success with multi-platinum albums and chart topping hits like: "Reminiscing," "Cool Change," "Lonesome Loser," "The Night Owls," "Take It Easy On Me," "Help Is on Its Way," "Happy Anniversary," "We Two," "Man On Your Mind," "The Other Guy," and "It's A Long Way There."

Visit a City Without Leaving Your Home



You will be fascinated by city tours as you click on any of 50 cities listed. You can also decide on normal speed or double it. Traffic noise and music volume can also be managed.

https://driveandlisten.herokuapp.com/

Modern Music Masters

Toru Takemitsu (1930-1996)



Takemitsu spent his childhood in China, and fell in love with western classical music when he heard it on American forces radio in Japan after the war. "My first teacher was the radio," he has said. Conscripted into military service as a teenager, for many years he thought of Japanese traditional music as a symbol of the bitterness battle. "I hated everything about Japan at that time because of my experience during the war," he said. He described how, in an effort to teach himself more about the western music he was hearing but about which he knew so little, he would walk through the city listening for the sound of a piano, whereupon he would "ask to touch the piano for five minutes. I was never refused!"

From the 60s on, Takemitsu's musical project would be to combine elements of Japanese music with the western modernism he loved so much. The blend is apparent in pieces such as <u>November Steps</u>, composed for biwa (the Japanese lute he studied intensively), shakuhachi and orchestra. The effect is more profound than a fuzzy fusion of styles; Takemitsu uses the timbre and texture of the two Japanese instruments to make the whole orchestra breathe and glow with gossamer lightness, something he continues in a later work for the same instruments called Autumn.

He was and still is an inspiration for the Japanese composers who have come after him, and he has made his musical aesthetic part of wider culture, too.

Green For Orchestra (November Steps II):

https://www.youtube.com/watch?v=acel9y1etRw

Tōru Takemitsu - "Autumn" (1973) for Biwa, Shakuhachi and Orchestra: https://www.youtube.com/watch?v=QYsZJkuDmbc

Equinox; Graham Banfield, Guitar: https://www.youtube.com/watch?v=tZ3mf-QnNIM

Rain Coming, pour orchestre de chamber: https://www.youtube.com/watch?v=C5fCEnY4tDE

Nostalgia for violin and string orchestra (1987): https://www.youtube.com/watch?v=Dhyp68JazHM

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Flash Mobs

Edvard Grieg, Flash Mob, "Peer Gynt", Bachus Classic Orchestra



https://www.youtube.com/watch?v=xsGabFKUhoY

Edvard Grieg, In the Hall of the Mountain King from "Peer Gynt" zielonogórski deptak Flash Mob. Zielona Góra Polish

Sound of Music | Central Station Antwerp (Belgium)



https://www.youtube.com/watch?v=7EYAUazLI9k

New 2021 Rule Changes for golfers Age 65+

- Rule 9k.34— If a tree is between the ball and the hole, and the tree is deemed to be younger than the player, then the ball can be moved without penalty. This is so, because this is simply a question of timing; when the player was younger, the tree was not there so the player is being penalized because of his age.
- Rule 1.a.5— A ball sliced or hooked into the Rough shall be lifted and placed on the Fairway at a point equal to the distance it carried or rolled into the Rough with no penalty. The senior player should not be penalized for tall grass which ground keepers failed to mow.
- Rule 2.d.6 A ball hitting a tree shall be deemed NOT to have hit the tree. This is simply bad luck and luck has no place in a scientific game. The senior player must estimate the distance the ball would have traveled if it had not hit the tree, and play the ball from there.
- Rule 3.B.3 There shall be no such thing as a lost ball. The missing ball is on or near the course and will eventually be found and pocketed by someone else, thereby making it a stolen ball. The senior player is not to compound the felony by charging himself with a penalty.
- <u>Rule 4.c.7</u>— If a putt passes over a hole without dropping, it is deemed to have dropped. The Law of Gravity supersedes the Rules of Golf.
- <u>Rule 5.</u> Putts that stop close enough to the cup that they could be blown in, may be blown in. This does not apply to balls more than three inches from the Hole. No one wants to make a mockery of the game.
- <u>Rule 6.a.9</u>— There is no penalty for so-called "out of bounds". If penny-pinching golf course owners bought sufficient land, this would not occur. The senior player deserves an apology, not a penalty.
- Rule 7.G.15 There is no penalty for a ball in a water hazard, as golf balls should float. Senior players should not be penalized for any shortcomings of the manufacturers.
- <u>Rule 8.k.9</u> Advertisements claim that golf scores can be improved by Purchasing new golf equipment Since this is financially impractical for many senior players, one-half stroke per hole may be subtracted for using old equipment.

Please advise all your senior friends of these important rule changes and keep multiple copies in your golf bag. Those not following the rules need to be provided a copy.

Golf is...above all...a game of integrity.

Ronald Reagan Goes for the Juggler at Ford's Theater



Part 1 https://www.youtube.com/watch?v=-Booteei-k0

Part 2https://www.youtube.com/watch?v=n6mbW-jMtrY

Ronald Reagan, Tip O'Neill, and Howard Baker get to take part in the act...sort of

Game Changers

Microsoft in the Days of DOS and BASICA



Microsoft Staff, 1978

My first contact with Microsoft came in 1981 when a friend asked what operating system I had on my Altair."CP/M," I replied, referring to Digital Research's 'dot command' routine that allowed me to do some rudimentary things with the equally rudimentary machine.

"Well come over and look at what IBM is doing with what it call its PC." He said so I did and was amazed that the operating system called DOS by an upstart Seattle company named Microsoft appeared to be a warmed over version of CP/M, as indeed it was. In addition his PC had what I knew as Altair BASIC, except here supplied under the name PC BASIC. Both of which were offshoots of the seminal program developed by Microsoft in 1976, the hook Bill Gates was to hang his hat on.

Over the years I have hung my hat on an ever-increasing number of Microsoft products beginning with the DOS-based MS Word 1.0 and climbing the ladder into and through the company's knock-off of Xerox's Star system, Windows, and a host of communications and networking applications.

In 2019, with more than 160 thousand employees and revenues north of \$140 billion, Microsoft reached the trillion-dollar market cap. In 2020, Microsoft had the third-highest global brand valuation.

One of the company's founders, Paul Allen, died in 2018 at the age of 65. Bill Gates continues to rock along as founder and chairman of the Bill and Melinda Gates Foundation.
