

## To the Planets Beyond

*“For the eyes of the world now look into space, to the moon and To The Planets Beyond and we have vowed that we shall not see it governed by a hostile flag of conquest, but by a banner of freedom and peace..... We choose to go to the moon!”* - John F. Kennedy, Rice University Speech, 1962

### 1961

- Yuri Gagarin becomes the first human in space.
- Alan Shepard becomes the first American in space, although his vehicle is unable to reach low Earth orbit and instead makes a suborbital flight.
- John F. Kennedy announces his plans before Congress to send a man to the Moon and back to Earth.
- The Bay of Pigs Invasion occurs, causing an embarrassment to the Kennedy Administration.

### 1962

- John Glenn becomes the first American in orbit around Earth.
- John F. Kennedy makes his “We Choose to go to the Moon” speech in front of Rice University.
- The Cuban Missile Crisis occurs.
- The N1 is conceptualised around this time. However, the final design would not be decided until 1964.
- The Nicaraguan Revolution begins.

### 1963

- Valentina Tereshkova becomes the first female in space, and the first civilian in space (prior to this, astronauts had a military background).
- President John F. Kennedy is assassinated. Lyndon B. Johnson takes the presidency.
- The American Prison Complex known as Alcatraz is closed.
- The Nuclear Partial Test Ban Treaty is ratified.

### 1964

- Lee Harvey Oswald is killed by Jack Ruby before being tried for the JFK assassination.
- Direct American involvement in Vietnam begins.
- General Secretary Nikita Khrushchev is removed from power, and replaced by Leonid Brezhnev.
- The British Invasion begins in America.
- The first computer program in BASIC is run.
- **Point of Divergence:** Korolev dies in the hospital of cardiac arrhythmia in February, resulting in a heated argument between Chelomey and Glushko over the fate of the OKB-1 design bureau. Brezhnev decides to compromise between the two, and thus, NPO Mashinostroyeniya and NPO Energia are born.
- The American Civil Rights Act of 1964 ends racial segregation in the States.

- *Voskhod 1* flies the first multi-person crew.

## 1965

- The first manned flight of the *Gemini* spacecraft occurs.
- The first orbital rendezvous is conducted between *Gemini 6A* and *Gemini 7*.
- Alexey Leonov becomes the first human to conduct a spacewalk.
- The first flyby of Mars occurs.
- **Point of Divergence:** The Soyuz begins a test flight, particularly the Soyuz 7K-OK. The flight is successful, and this paves way for testing the Soyuz 7K-LOK variant by early 1968 (mainly due to increased priority and rushing), through the N1 is scrapped in favour of the Proton rocket.
- Malcolm X is killed.
- Medicare and Medicaid are established.

## 1966

- The *Venera 3* probe becomes the first craft to reach the surface of another world: Venus.
- *Luna 9* becomes the first object to land on the Moon, which also brings the first images from another celestial body.
- *Gemini 8* becomes the first orbital docking procedure successfully conducted in space.
- Days following the *Gemini 8* docking, the *Soyuz 2* and *Soyuz 3* perform the Soviet Union's first manned orbital docking procedure (due to the success of the *Soyuz 1* mission, the *Soyuz 2* and *Soyuz 3* were manned, rather than unmanned).
- Nigeria's government is overthrown in a military coup.
- The Cultural Revolution begins in the PRC.
- France leaves NATO, which causes NATO to move its HQ from Paris to Brussels.

## 1967

- *Apollo 1* takes off from Cape Canaveral, conducting a test of the Apollo craft. The mission ends in failure after the Saturn IB loses roll control 4 minutes into the flight, and the mission is forced to abort. The astronauts return safely to Earth, although by then, the *Apollo 1* mission becomes a public embarrassment for NASA. The Apollo missions 2 and 3 are then postponed to check the problem with the second stage, and Apollos 4 - 6 are made unmanned and also delayed.
- Soyuz missions 4 through 6 begin conducting tests of the equipment of the Soviet Lunar Landing.
- The Nigerian Civil War begins.
- The Outer Space Treaty of 1967 is signed.
- The Cambodian Civil War begins.
- The Six-Day War occurs around this critical time, expanding Israel's borders.
- The PRC tests its first thermonuclear bomb.
- The first pulsar is discovered, initially believed to be an extraterrestrial signal.

## 1968

- *Apollo 8* becomes the first American spacecraft to orbit the Moon.
- The first test flight of the Soyuz 7K-LOK variant occurs after a period of development. The mission becomes a success as the Soviet astronauts Gorbatko, Makarov and Kuklin, become the first men to orbit the Moon. The mission is known as *Soyuz 10*.
- *2001: A Space Odyssey* by Stanley Kubrick is released.
- The Prague Spring occurs around this critical time.
- Martin Luther King Jr. is assassinated, which is followed by nation-wide rioting.
- The Tet Offensive begins in Vietnam.
- The Civil Rights Act of 1968 is signed by Lyndon B. Johnson.
- Months after the success of Soyuz 10, Alexey Leonov, whom previously conducted the first spacewalk of Earth, becomes the first human on the Moon on the *Soyuz 12* mission, along with Yevgeni Khrunov onboard the L4 Moon Expeditionary Complex. This becomes a national embarrassment for the United States, and following this defeat, America vows to beat the Soviets to the Red Planet.
- Richard Nixon becomes the 37th POTUS.

## 1969

- First American astronauts land on the Moon in the *Apollo 11* mission (Neil Armstrong and Buzz Aldrin) a year following the Soviet Lunar Landing, although at this point, the Americans are more concerned with landing on Mars. This becomes the first multi-crewed landing on a celestial body.
- *Skylab 1* is launched into LEO as humanity's first orbital station to compensate for the loss of the Moon Race.
- ARPANET is invented.
- America begins to withdraw from Vietnam.
- Border clashes occur between the Soviet Union and the PRC.
- Colonel Muammar Gaddafi comes to power in Libya.
- The Indian Space Research Organisation (ISRO) is formed.

## 1970

- The Nigerian Civil War ends.
- The first celebration of Earth Day begins.
- American forces launch an invasion of Cambodia to hunt down the Viet Cong, sparking anti-war protests.
- The Soviet Tu-144 exceeds Mach 2 as a commercial plane.
- Argentina faces a military coup and a military junta comes into power.
- The Gulf of Tonkin Resolution is repealed.
- The Cambodian Civil War begins.
- *Venera 7* becomes the first spacecraft to successfully transmit data from another planet.
- The American government establishes the Environmental Protection Agency.

- Around this decade, scientists notice the first visible signs of anthropogenic climate change.

#### 1971

- The USSR launches *Salyut 1*, becoming the first Soviet space station in LEO.
- The American government ends its trade embargo on the PRC.
- The War on Drugs begins. This would have an adverse effect on the American population and lead to a rise in crime rate, and lead the States to hold the largest prison population.
- The first e-book is published.
- The Black Arrow rocket family is scrapped.
- Greenpeace is born.
- The RoC loses its UN Security Council position to the PRC.
- The Bangladesh Liberation War occurs around this time.
- *Apollo 19* is the first mission to establish a mini-outpost on the Moon, using the LESA plan, but starting with the AES with the long term goal of ensuring that the infrastructure for sustaining a future mission to Mars becomes doable for the States.

#### 1972

- President Richard Nixon visits China.
- The Watergate Scandal occurs.
- The Magnavox Odyssey becomes the first commercial gaming console.

#### 1973

- *Salyut 2* launches as part of the USSR's Almaz program. It becomes the first military space station in recorded history.
- *Skylab 2* is launched as a dry-lab space station, in comparison to the wetlab nature of *Skylab 1*.
- *Apollo 22* becomes the last manned American mission to the Moon until the early 21st Century.
- The American government begins a secret program called *Project: Loki*. The program is designed to develop orbital kinetic strike satellites with global strike capability to target any location on Earth from space. When the Soviets discover this later in the year, they begin to commence work on the *Dozhd* (meaning "rain" in Russian) program in collaboration with the *Salyut* program.
- *Soyuz 25* becomes the first mission to establish a Soviet mini-outpost on the Moon.
- The Yom Kippur War occurs.
- The last American troops leave Vietnam.

#### 1974

- Development begins on the *Integrated Manned Interplanetary Spacecraft* or *IMIS* for short first proposed in 1968, albeit with updates to the design to ensure partial reusability at least. This is particularly shown in the PPM-1 stage, which has had its NERVA engine

be replaced by a cryogenic chemical rocket engine to reduce Delta V costs, and the development of a cryogenic chemical rocket tug to assemble the parts in Earth-Moon L<sub>2</sub>.

- The last manned mission to the Moon until the early 21st Century: Soyuz 28 is launched.
- President Richard Nixon becomes the first president to be impeached by Congress, and Gerald Ford becomes the 38th POTUS.
- The Arecibo Message is sent to Messier 13.
- India tests its first nuclear weapon.

## 1975

- Development of the Russian MEK proposed in 1969, and the UR-700 rocket, now known as the Moshch rocket, begins as the response to the American IMIS design.
- The Altair 8800 is released.
- South Vietnam falls to North Vietnam and the nation is reunited.
- Microsoft is born.
- The ESA is born.
- The Cambodian Civil War ends.
- Development begins on the Energia booster as a heavy lift rocket by Glushko's NPO Energia (in real life, this happened a year later).
- The first Indian satellite, the Aryabhata is launched by the Soviet Union using a Kosmos-3M launch vehicle.
- The Lebanese Civil War begins.

## 1976

- *Viking* probes 1 and 2 successfully land on Mars.
- Chelomey begins the *Narod* spacecraft's development to use as part of the *Moschch* rocket, along with the *MK* lander.
- Mao Zedong dies of a heart attack.
- The Cultural Revolution comes to an end.
- Jerry Brown becomes the 39th POTUS.

## 1977

- The first of the *Project: Loki* kinetic orbital bombardment satellites is launched to coincide with the release of *Star Wars*.
- *Star Wars* is released by Lucasfilm Ltd., and becomes a box office success.
- Voyagers 1 and 2 are launched and these probes would become man's first interstellar spacecraft at the start of the 21st Century.
- The Atari VCS/2600 is released.
- Spain holds its first democratic elections after 41 years of being under the Franco regime.
- Wernher Von Braun dies at the age of 65.

## 1978

- The first of the Soviet *Dozhd* satellites begins launch.

- A test craft is launched into LEO by the US government under the *Von Braun 1* mission on the first anniversary of Wernher Von Braun's death, which becomes the first successful test of a nuclear thermal engine in space. The rocket is able to reach the orbit of the Moon before being sent into a collision course with the Moon.
- NASA prepares plans to construct orbital stations in the Earth-Moon Lagrange points, using  $L_2$  as a propellant depot, and the  $L_4$  and  $L_5$  as a location for research facilities and even permanent colonies, although proposals for the latter are available as early as 1974. The former are to conduct research on long term human duration beyond LEO, help in the assembly of future spacecraft being sent beyond Earth's gravitational sphere of influence, and are also designed to find ways to increase the efficiency of solar panels.
- The Afghan Civil War begins.
- Charon is discovered as a satellite of Pluto.
- Soviet nuclear stockpiles exceed the American nuclear stockpiles.
- The first of the GPS satellites begins launch.

## 1979

- The USSR begins testing a nuclear-powered ion drive for future Mars missions. The engine is able to accelerate the craft to the point of reaching the Red Planet, thus becoming the first practical test of an ion drive for interplanetary missions.
- The US government launches the *Von Braun 2* mission to test the NERVA engine on a trajectory to Mars (which is assisted by a swingby of Venus). The test is a success.
- The USSR invades Afghanistan to assist the newly installed pro-Soviet regime.
- The Sino-Vietnamese War begins.
- The Three-Mile Island incident occurs.
- Margaret Thatcher becomes the UK's first female Prime Minister.
- *Skylab III* is launched to replace the ageing *Skylab II*.
- *Pioneer 11* becomes the first spacecraft to visit Saturn.
- Smallpox is eradicated.
- China's one child policy is implemented as part of Deng Xiaoping's reforms.
- VisiCalc becomes the first commercial spreadsheet program.
- The Islamic Revolution occurs.
- The assembly of an orbital propellant depot begins in Earth-Moon  $L_2$  to set the stage for future missions to the Moon and beyond.

## 1980

- At this point in time, around 17 satellites of *Project: Loki* are operational.
- Pac-Man is released in Japan.
- The US decides to boycott the 1980 Olympics in response to the Soviet Invasion of Afghanistan.
- ISRO places the satellite Rohini into orbit using the indigenously made SLV-3.
- The Iran-Iraq War begins.

- Ronald Reagan is elected the 40th POTUS.
- Former Beatles member John Lennon is shot outside his home in NYC.

## 1981

- An assassination attempt occurs against Ronald Reagan, whom survives.
- The first recognised case of HIV/AIDS is reported in the States.
- The *Columbia* shuttle is launched into LEO, becoming the first partially reusable launch vehicle.
- The Soviet Union launches the *Narod 1* to conduct a Lunar flyby and test the RD-0410. The mission becomes a success, becoming the first manned test of a nuclear thermal rocket engine.
- The IBM PC is released.
- Reagan begins to fund the Contras.

## 1982

- The IMIS *Endeavour* is assembled in Earth-Moon  $L_2$ .
- The first manned Mars mission is launched under the *Ares 1* rendezvous with the IMIS *Endeavour*. Shortly after docking with the Mission Module, the craft leaves Earth-Moon  $L_2$  for Mars. However, the mission ends in failure following a rupture in the reactor caused by micrometeorites punctures during Mars orbital insertion, rendering the crew stranded. This results in a huge national tragedy for the States as the crew is declared KIA due to extreme radiation poisoning several days later, thus delaying the launch of the *Ares 2* mission by two years.
- The *Narod 6* mission is launched towards Mars' moon of Deimos, days after the IMIS *Endeavour* Incident, though a launch pad explosion occurs just 15 seconds into the launch, and the 5 man crew is KIA. The Baikonur Cosmodome is closed for the remainder of 1982, while Chelomey's career is destroyed and the *Narod* program with it. As a result, Valentin Glushko absorbs NPO Mashinostroyeniya into NPO Energia, effectively uniting the Soviet Space Program. Construction begins on Vostochny Cosmodome in Siberia.
- Around 40 *Project: Loki* satellites are reported to be in LEO around this time, as well as 33 *Dush* program satellites.
- The X-30 begins development.
- The Commodore 64 is released.
- The Falklands War occurs around this time.
- Israel begins to withdraw from Lebanon.
- Leonid Brezhnev dies and is replaced by Yuri Andropov.
- China becomes the first nation to have more than 1 billion humans.

## 1983

- ARPANET's migration to TCP/IP is completed. This signals the beginning of the Internet.

- The IMIS *Constitution* is assembled in Earth-Moon L<sub>2</sub> to compensate for the loss of the IMIS *Endeavour*, in this case aimed for a Venus flyby, which goes under a separate mission name: *Aphrodite*. The *Aphrodite 1* is launched days following successful assembly, and by November, the crew of the IMIS *Constitution* achieve the first successful orbit on another planet, with a 40-day stay before making the Venus Departure Burn.
- The SDI is announced by the Reagan administration, also known as the Star Wars Project, hoping to integrate Project: Loki and create a space defence shield.
- Korean Airlines Flight 007 is shot down over Soviet airspace.
- The Able Archer 83 incident occur, along with the Serpukhov-15 Incident.
- Chuck Hull becomes the inventor of the first known 3D printer, although commercial applications would not come until the early 21st Century.
- *Pioneer 10* becomes the first man-made object to leave the Solar System's major planets.
- The Baikonur Cosmodome resumes operations following a cleanup and lockdown of the explosion site.
- The GPS is made available for civilian use.
- The Nintendo NES is released in Japan.
- The US government invades Grenada.

#### 1984

- The USSR decides to boycott the 1984 Olympics.
- The Apple Macintosh is released.
- Svetlana Savitskaya becomes the first female to conduct a spacewalk on the *Salyut 7*.
- Konstantin Chernenko replaces Yuri Andropov following his death.
- Space Station *Freedom* is announced.
- The *Aphrodite 1* mission returns to Earth.

#### 1985

- The Internet's Domain Name System (DNS) is created.
- Mikhail Gorbachev rises to power around this time.
- Windows is created by Microsoft.
- DNA is first used in a criminal case.
- Assembly of an additional craft known as the IMIS *Enterprise* is done in Earth-Moon L<sub>2</sub>.

#### 1986

- The *Ares 2* mission is launched to Mars.
- American astronauts Larry D. James (MEM pilot), Bonnie J. Dunbar (Mission Commander), and Franklin-Chang Diaz (Physicist) are the first humans on Mars, while Mrs. Dunbar is the first female on another celestial body and first American woman in space, and Franklin-Chang Diaz becomes the first astronaut in a celestial body from a third world nation. The three also complete the first long-term duration mission on a celestial body. During the 40-day stay, they discover evidence of both fossilised and

living microbes on the Martian surface, and signs of liquid water, albeit not usable to humans without processing.

- The *Mir* space station begins assembly.
- Mikhail Gorbachev announces his Perestroika and Glasnost reforms.
- The Chernobyl Disaster occurs. Western media outlets call this incident the “The IMIS *Endeavour* of Earth”.
- The Iran-Contra Affair occurs.
- The Somali Civil War begins.

## 1987

- The *Ares 2* returns to Earth safely. President Reagan then proclaims that “a new chapter of human history has begun.”
- The IMIS *Liberty* is constructed in LEO, as well as the IMIS *Uncle Sam*, the IMIS *Atlantis*, the IMIS *Pathfinder*, the IMIS *Challenger*, and the IMIS *Curiosity*.
- The USSR launches the *Buran* shuttle, becoming the first partially reusable rocket launched by the USSR via the new Energia booster.
- The Montreal Protocol is signed.
- The *Polyus* spacecraft, designed to shoot down military satellites, is launched into LEO, becoming the first military spacecraft to be launched in human history.

## 1988

- Gamma Cephei Ab becomes the first discovered exoplanet (although it is not confirmed until 2002).
- The American government and the Soviet Union conduct a series of negotiations to reduce nuclear stockpiles on both sides and limit space militarisation in Vienna, which becomes known as the Vienna Convention to human history and represents the first true effort to reduce the threat of nuclear conflict since the launch of *Project: Loki* in 1977, and the first true effort to limit the militarisation of space. The treaty limits the amount of orbital bombardment satellites to 200 maximum and 130 minimum. The two programs have 112 *Project: Loki* satellites and 110 *Dozhd* satellites still operational in LEO.
- The Intergovernmental Panel on Climate Change is born.
- NASA scientist James Hansen testifies before the American Senate that anthropogenic climate change has already begun.
- Al-Qaeda is formed by Osama Bin-Laden, as the USSR begins to leave Afghanistan.
- The Iran-Iraq War ends with 1 million dead.
- George H.W. Bush becomes the 41st POTUS.
- Birthrates in the USSR start to decline as Perestroika and Glasnost are implemented.

## 1989

- The Warsaw Pact begins to collapse around this time.
- The first designer baby is born.
- The first proposal for the World Wide Web is born.

- Ares 5 becomes the last American manned mission to Mars until the early 21st Century, as does the Aphrodite 4 to Venus.
- The Exxon-Valdez oil spill occurs.
- The Tiananmen Square Massacre occurs.
- Genetic modification of adult humans is attempted for the first time.
- *Voyager 2* makes its closest approach of Neptune.
- Galileo is launched in a mission to study Jupiter using the technology used during the *Ares* and *Aphrodite* programs.
- Scheduling begins for a joint US-Soviet mission to the *Mir* Space Station.
- The last of the Soviet troops in Afghanistan leave the region.
- Soviet Space Program Chief Designer Valentin Glushko dies.
- China begins development of the *Shenzhou* spacecraft.

### 1990

- The joint US-Soviet Mission to the *Mir* Space Station occurs with the American astronauts onboard the *Buran* shuttle, signaling an end to the Space Race.
- Additional negotiations begin between the US and the Soviet Union to reduce nuclear stockpiles and kinetic strike satellites.
- The Reunification of Germany occurs.
- The first Transatlantic Internet connection is made.
- Tim-Berners Lee conducts the testing of the world's first web page.
- Hussein invades Kuwait, forcing the US to commence Operation: Desert Shield.
- The Human Genome Project is launched.

### 1991

- Operation: Desert Storm occurs, forcing Iraq out of Kuwait.
- India begins research on their own version of *Project: Loki* and the *Dozhd* program: the *Nashak* (Hindi for "Destroyer") program.
- The USSR is reformed under the New Union Treaty into the Union of Soviet Sovereign Republics, although the Baltic States, Moldova, Georgia, Azerbaijan and Armenia have already declared independence from the old Soviet Union by then.
- SUPARCO (Pakistan's Space Agency) begins developing the *Nijat* (Urdu for "salvation") rocket in order to reduce the dependence on foreign rocket launches.
- The Lost Years begin for Japan.
- The Cold War comes to an end.
- The Federal Aerospace Agency is born as the official name of the Soviet Space Program.

### 1992

- The EU is born
- NAFTA is born.
- The first confirmed detection of an exoplanet occurs around this time, orbiting a pulsar known as PSR B1257+12.

- Bill Clinton becomes the 42nd POTUS.
- The assembly of an additional orbital propellant depot begins in Earth-Moon L<sub>2</sub> to assist in the further construction of spacecraft in Earth-Moon L<sub>2</sub> by the USSR.

### 1993

- The DFA-2 gene is discovered.
- The Americans begin to become involved in the Somali Civil War.
- The MEK *Zima* is assembled in Earth-Moon L<sub>2</sub>. The first of the Soviet Mars missions known as *Odisseya 1* launched onboard the *Ptichka* shuttle.
- The Maastricht Treaty is signed, leading to the formation of the EU.

### 1994

- China begins testing of the *Shenzhou* spacecraft.
- *Odisseya 1* arrives on Mars, and Soviet Cosmonauts Boris Mokurov, Valeri Tokarev, and Sergei Zalyotin become the first Russians on Mars.
- The first Macintosh computers to use microprocessors is released.
- The Rwandan Genocide occurs.
- Apartheid comes to an end around this time, as Nelson Mandela comes into power.
- Shoemaker-Levy 9 breaks apart and its fragments crash into Jupiter.
- Chechnya attempts to declare independence from the USSR, starting the First Chechen War.

### 1995

- The World Wide Web enters the public consciousness for the first time.
- The *Odisseya 1* returns to Earth.
- The WTO is born.
- The Soviet Union begins to host its first democratic elections as Mikhail Gorbachev is elected to a second term in office.
- Zhirinovskiy forms the National Democratic Party of the Soviet Union following his defeat with Mikhail Gorbachev and the CPSU, as the Liberal Democratic Party of the Soviet Union decays, and the Liberals in the party join the Democratic Union.
- Windows 95 is released.
- The Norwegian Rocket Incident of 1995 occurs.
- Austria, Sweden, Norway and Denmark join the EU.

### 1996

- Garry Kasparov loses a chess game to the IBM computer Deep Blue.
- The *Shenzhou 5* mission sends the first Taikonauts in LEO, making China the third nation in space and the first developing nation to send humans beyond Earth's atmosphere.
- Dolly the Sheep becomes the first cloned animal in human history.
- Data from the *Galileo* space probe suggests evidence of water in one of the Jovian Moons.

- NASA, the ESA and the FAA announce the decision to create a joint Lunar outpost and the first of the L<sub>4</sub> and L<sub>5</sub> stations to be assembled by the start of the next century.
- Pakistan, due to rising costs, is forced to scrap the *Nijat* rocket family.
- The first electric car comes into production around this time.
- Assembly of Space Station *Freedom* begins using IMIS-derived technology.
- *Mir* at last completes assembly.
- The First Congo War occurs.
- The Soviet Miracle begins.
- The First Chechen War comes to an end with the USSR defeating the attempted revolt.

### 1997

- The first space burial occurs.
- NASA's *Pathfinder* probe lands on the Martian surface in an attempt to find a suitable location for a possible future outpost.
- The Kyoto Protocol is adapted by a UN committee.
- The first hybrid vehicle goes into production.
- The First Congo War ends.
- Mikhail Gorbachev resigns as President of the Soviet Union and leaves the Communist Party to form the Social Democratic Party of the Soviet Union. He is then replaced by Vice President Gennady Yanayev (now Acting President).
- The Cassini-Huygens Probe is launched to Saturn.
- Hong Kong is given back to China, which becomes a Special Administrative Region of China.

### 1998

- The *Lunar Prospector* craft finds evidence of water ice located in the Lunar Polar Ice Caps, thus allowing NASA to decide on a location for the new *International Lunar Outpost on Shackleton Crater on the Lunar South Pole.*
- The *Galileo* probe detects liquid water beneath Europa's thick crust of ice.
- Windows 98 is released.
- Google is born.
- The Second Congo War begins.
- The Monica Lewinsky Scandal occurs, which results in impeachment proceedings starting by the end of the year.
- The last Soviet Mars Mission until the 2020s: *Odisseya 3* returns to Earth.
- The Large Hadron Collider begins construction.

### 1999

- Around this time, former Warsaw Pact members begin to join NATO.
- ExxonMobil is born.
- Macau is given back to China as a Special Administrative Region.
- Assembly for the *International Lunar Outpost* begins.

- Acting President Gennady Yanayev announces that he will not run for the 2000 elections.
- The Second Chechen War begins, as Ichkeria declares independence (again). Shortly after, Al-Qaeda begins deploying foreign fighters into Chechnya.
- Cosmic Call 1 is sent into space.

## 2000

- Nikolai Ryzhkov wins the 2000 elections, under the CPSU platform.
- The PlayStation 2 becomes the best selling console of all time.
- Bashar Al-Assad becomes the President of Syria.
- Blue Origin is born.
- George W. Bush becomes the 44th POTUS, but following an attempted Florida recount, the US Supreme Court decides not to conduct it, although this would result in public outrage, as protests break out demanding that the Supreme Court reverts their decision. The protests continue until the next year to no avail. This is known as one of the most controversial elections in American history.

## 2001

- On Inauguration Day, President George W. Bush is assassinated by Gulf War veteran Victor Scott, whom is later arrested and sentenced to death. He would be executed before May.
- Mac OS X is released by Apple.
- Dennis Tito becomes the first space tourist on Space Station *Freedom*.
- The *International Lunar Outpost* is completed as humanity's first permanent outpost on a celestial object and the first crew is sent there on the 33rd anniversary of the release of *2001: A Space Odyssey*.
- The 9/11 attacks occur, killing over 3,000 people in the US and 2,500 in the USSR, triggering the War on Terror. The Kremlin, the Church of the Saviour on Spilled Blood, St. Basil's Cathedral, the HQ of the Soviet Armed Forces, the Gosbank Building, and Red Square are damaged and Moscow is placed on lockdown, while the World Trade Center is destroyed and the Pentagon is damaged. The Soviet Miracle ends.
- Windows XP is launched.
- Shortly after the 9/11 attacks, President Cheney establishes the Department of Homeland Security and sends troops to Afghanistan, where they topple the Taliban. The USSR meanwhile, decides to send additional troops to Chechnya and assist the States in Afghanistan.

## 2002

- A large section of the Antarctic Larsen Ice Shelf begins to disintegrate.
- Quaoar is discovered.
- The African Union is born.
- The Iraq Crisis occurs between the US and the USSR, with the US threatening to invade Iraq over its supposed WMD program. The USSR in response threatens to end military

cooperation in Afghanistan, and to consider an invasion of Iraq as an act of war. The result is that the American government is deterred from invading Iraq, forcing them to change tactics to remove Hussein.

- At this point in time, *Mir* is deorbited.
- Assembly of the L<sub>4</sub> and L<sub>5</sub> stations begins.
- SpaceX is born.
- The *Terrestrial Planet Finder* begins development.
- The Sudanese Civil War begins after South Sudan declares independence from Sudan.

## 2003

- Cosmic Call 2 is sent out into space.
- The Human Genome Project is completed.
- The Darfur Conflict begins.
- Mars makes its closest approach to Earth in 50,000 years.
- The *International Lunar Outpost* is expanded to include a launch facility and additional ISRU equipment.
- The US invades Sudan following the discovery of possible evidence Osama Bin Laden fled there and is funding the government against uprisings in South Sudan. Cheney follows by deploying troops to Somalia to fight Al-Qaeda affiliates in the region and crack down on piracy in that region's territorial waters.

## 2004

- *SpaceShipOne* makes its maiden flight.
- The *Cassini-Huygens* Probe arrives on Saturn.
- Following the 2004 elections, in which Cheney is elected for a second term in office, the DNC sues the Cheney Administration on account of electoral fraud. This eventually leads to the *Democratic National Committee v. The United States* case, which leads to the Supreme Court opting in favour of the Cheney Administration, much to the dismay of many Americans.
- Hungary, Malta, Cyprus, Czech Republic, Slovakia, Poland, Estonia, Latvia and Lithuania join the EU.

## 2005

- Eris is found.
- The *Huygens* probe lands on Titan.
- YouTube is born, signaling the birth of social networks.
- NASA announces plans to establish a permanent outpost on Mars and at least 3 additional Lunar outposts before 2030.
- Azerbaijan rejoins the Soviet Union in the months leading up to the 2005 elections in the country. Mongolia quickly follows, as it becomes the Mongolian Soviet Socialist Republic.

- Nikolai Ryzhkov is reelected as President of the USSR, thanks to his handling of the Iraq Crisis, Azerbaijan's reentry into the Soviet Union, and Mongolia's membership into the country by a slim, but significant majority.
- Tannu Tuva holds a referendum to join the Mongolian SSR, in which an overwhelming majority vote "Yes", officially signalling Tannu Tuva's status as an Autonomous SSR.
- The Spaceship Company is born out of Virgin Galactic and Scaled Composites.

## 2006

- Kennedy Base is established as the first Lunar outpost owned by a national government.
- Pluto is demoted to a dwarf planet.
- Geysers are discovered in Enceladus by the *Cassini-Huygens* probe.

## 2007

- The IPCC publishes its 4th assessment report, which concludes that recent climate change is likely to have an anthropogenic cause.
- GI 581 c is discovered as a potentially habitable exoplanet. However, later studies would cast doubt on the planet's habitability.
- Bulgaria and Romania join the EU.

## 2008

- SpaceX's *Falcon 1* becomes the first private spacecraft in LEO, ending the monopoly of national space programs over aerospace infrastructure.
- NASA signs contracts with SpaceX to begin asteroid mining by 2018, with NASA providing the company research regarding robotic spacecraft designed to mine out asteroids and to be carried onboard the old IMIS tugs, preceded by an asteroid capture mission by NASA.
- The Large Hadron Collider is completed.
- Barack H. Obama becomes the 45th POTUS. He is the first African-American President in the nation's history.
- India launches its first Vyomanauts onboard the *Camatanam 7* after a period of testing with the previous 6 missions.
- Leonov Outpost is established near the *Soyuz 14* Landing Site in Oceanus Procellarum, in honour of Alexey Leonov.

## 2009

- The Kepler space telescope is launched in its quest to search for exoplanets.
- The H1N1 pandemic occurs.
- GJ 1214 b is found as a possible water world.
- NASA announces its *Asteroid Capture Mission* as part of its contract with SpaceX.
- The US begins to withdraw from Sudan and Afghanistan, leaving the former to be handled by the local government and the latter to the USSR.
- Planetary Resources Inc. is born as Arkyd Aeronautics.

## 2010

- The Social Democratic Party of the Soviet Union obtains a slim majority in the Supreme Soviet, although Nikolai Ryzhkov is able to maintain a majority of the popular vote by a slight margin. This is the first time in Soviet history that a non-communist political party has had control of the Supreme Soviet.
- The Deepwater Horizon incident occurs.
- Humanity begins to trap antimatter for the first time.
- The Arab Spring begins.

## 2011

- The First Libyan Civil War occurs, with NATO intervention being condemned by the USSR. The USSR then begins to provide assistance to the Gaddafi government.
- The joint US-European Outpost (Soviet was removed from the name during the First Libyan Civil War, due to rising tensions) on Mars to be scheduled for a 2012 launch is to be named in a contest sponsored by NASA, the ESA and the UNOOSA. By December, the winner is declared to be *Humanity*, effectively making the outpost's name *Humanity Station*. Meanwhile, the USSR releases its plans to construct a separate outpost on Mars.
- NASA announces that asteroid 1998 KU2 is the target asteroid for its *Asteroid Capture Mission*, now part of the larger *Asteroid Initiative*.

## 2012

- The Iraqi Civil War begins between the Sunni-led government (controlled by Saddam Hussein) and the Shia majority rebels.
- The Higgs Boson is found.
- The First Syrian Civil War begins.

## 2013

- The First Libyan Civil War ends, as Gaddafi is removed from power and killed.
- Osama Bin Laden is killed during a military operation in Yemen (in OTL, he was killed in Pakistan), by US Navy SEAL Team 6, British SAS forces and Soviet Spetznaz.
- The NSA surveillance disclosures occur.
- Albania joins the EU.

## 2014

- The Ebola Epidemic begins in West Africa.
- The IPCC releases the 5th Assessment report, urging governments to take action.
- Normal relations between the States and Cuba are restored.
- American forces have completely left Sudan at this point.
- The Yemeni Civil War begins.

## 2015

- The *Dawn* spacecraft reaches Ceres, becoming the first probe to reach a dwarf planet.
- The *New Horizons* probe reaches Pluto.
- *Humanity Station* begins assembly on Mars.
- LIGO detects gravitational waves.

- The COP 21 results in the Paris Agreement.
- The Asteroid Capture Mission is launched to 1998 KU2.
- Nikolai Ryzhkov loses the election to Independent candidate and former Kazakh Communist Party First Secretary Nursultan Nazarbayev, who goes on to become President of the Soviet Union.

## 2016

- The Asteroid Capture Mission reaches 1998 KU2.
- The first crew of astronauts is sent to *Humanity Station*. Later in the year, the base becomes fully operational.
- The Panama Papers Leak occurs.
- AlphaGo defeats Lee Sedol, becoming the first computer system to do so.
- The United Kingdom votes to remain in the EU.
- The Islamic Nation of East Africa (or JISA in the Arabic acronym) begins to spread like a fire across Sudan.
- Donald Trump becomes the 46th POTUS, defeating Hillary Clinton in the most controversial election since 2000. This results in various protests across the West Coast calling for secession from the United States.

## 2017

- US airstrikes are initiated against JISA in Sudan.
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### **Conclusion (AH.com Only)**

*“Most historians no longer doubt that Alexey Leonov’s first steps on the Moon have given the people of humanity the motivation to expand its knowledge of the Universe. It was clear that what originally signalled the triumph of Communism in space, soon became the thing that signalled the start of humanity’s expansion into the Solar System. In that time, space became a new economic and scientific playground for mankind, but with it, it became a potential and dangerous battlefield from a military and political perspective. The two superpowers raced to beat the other to a planet 225 million kilometres away from Earth, but in the process, new innovations sprung. One of these proved to be the miniaturised nuclear reactor, originally used for IMIS, now turned to reactors capable of running whole cities at a reduced cost and in a small amount of mass, which could one day lead to nuclear powered ground vehicles, if possible. Orbital propellant depots now provide fuel to missions beyond the Earth-Moon System, and the colonisation of the Moon is already in progress. In fact, by the time publication of this book begins, the colonisation of Mars may already be in progress. Earth has already experienced the dawning of the age of computers and at the same time, genetic manipulation. While technological innovation has, indeed, advanced, it also has its own set of problems. Pollution, military conflict, social decay, and the potential for new breeds of warfare remain. Of course, what would have had been different if the Americans won the Moon Race? We will never know. However, we do know that history would have had taken a different course.....” - Lisette Sauvage, *A History of Space Exploration*, Chapter 3: The Effects of Leonov’s First Steps.*

### **Discussion**

Alright, so before I start the next PoD, which will involve Khrushchev attempting to hold on to power, what should be between 1963 and before that in 1964? Why does Khrushchev need to hold onto power? Oh, this is before I came up with the idea. And that is to make sure Russia wins the Moon Race. :P

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Looks like a good start! I'm sorry for all the comments, but I enjoyed the discussion and hope to see what comes of this! - e of pi