

## 20 Million Miles to Earth Notes

### THE FILM

- We're coming up to the film's 65<sup>th</sup> anniversary!
- Opening narration gets into atomic age and space age, but that's about it. This was when the Space Race kicked off.
- Directed by a Nathan (Juran). No wonder it's good. :P
- This kid is an Italian proto-Kenny.
- There'd be bigger waves when that rocket hit.
- It's cool that the blu-ray lets you switch between color and B&W. Which do you prefer? (I like B&W).
- These Sicilians are the most Italian Italians who ever Italian-ed. It must be asked: Is death on the line? They're also very Catholic. Lots of crossing. They're presented as very bumpkin-ish.
- The interior of this ship is weirdly industrial. It doesn't look like the inside of a rocket. It's also HUGE.
- "General Hack-n-Dash"?
- Eww. A space turd.
- "A doctor of people who hurt." Ha! A "passable" one.
- "True fact." Redundant, kid.
- I love how Pepe thinks Texas is its own country, and he wants to be a cowboy.
- "I'm not a nurse. I'm a doctor. Or almost a doctor." She's a feisty mama.
- The Ymir's first appearance when it hatches is impressive. Gelatin. I love that it starts small and grows big. As soon as it hatches, I feel sorry for it.
- The model the doctor holds is definitely less impressive.
- Harryhausen's special effects are rightfully praised, but I think the sound design needs to be mentioned. Especially the noises for the Ymir. It creates tremendous personality and sympathy.
- Col. Calder and his crew as the first to make an interplanetary voyage. A nod to the Space Race.
- The Ymir is a native animal to Venus. He was brought to Earth to study in order to learn how life lives on Venus in order to acquire minerals from Venus. They want to know how it can survive on the harsh planet and poisonous atmosphere.
- The kid just got rich! I bet grew up to be the best businessman in Sicily.
- You actually wonder for a second if the Ymir will hurt the lamb.
- The dog attacks the Ymir behind a hay bale and in the shadows. It's a striking image, but it also saves on budget. It also shows that the Ymir will attack in self-defense. It's shorthand to show how evil something or someone is by having them kill a dog, but this dog attacked the Ymir. This is called out by Calder. The integration of the Ymir with the actors is quite impressive. Better than the clips with the animals.

- When you piss off an Ymir, they are *vicious* for such gentle creatures. I can't help but feel sorry for the creature. It was just born, it's in a strange environment, and everyone is attacking him or trying to capture him.
- The bit with the bandage is cute. It's a shoehorned romance, but cute.
- The Americans want to capture the creature and study it, but the locals want to kill it after it attacks a man. This creates some conflict.
- How do you discover "quite by accident" that Ymir are susceptible to electric shock?
- The colorized version looks weird. The color palette looks limited. It wasn't originally color. Too much green.
- Sicilian cops have flamethrowers?!
- It eats sulfur. Makes sense. There's a lot of it on Venus.
- I can't begin to imagine what it was like animating the Ymir one frame at a time when it has a net on it or when he's pulling the cage cover inside. Then there's the shock scene. It looks great!
- XY-21 rocket.
- It gets huge because of Earth's atmosphere. It speeds up its metabolism.
- There's a Japanese scientist here, interestingly. He has a thick accent. We don't see his face for a while. It made me wonder if he wasn't an Asian actor.
- Harryhausen animated the sleeping Ymir's breathing.
- Marisa is pretty assertive with Calder. She makes it known that she's getting impatient with him not taking her on a date.
- The Ymir has no heart or lungs and instead a series of tubes. That's why guns don't hurt it. Wouldn't that also keep it from making sounds? I'm also pretty sure that wouldn't make it immune to bullets.
- A highlight of the film is the Ymir fighting the elephant. There's both a real elephant and a miniature. Integrated well.
- That's a huge elephant! They're usually around ten feet tall. This one has to be at least King Kong '33 tall.
- Calder's gonna change into Superman in the phone booth!
- I wish they'd leaned more into the Ymir being gentle unless provoked. It would've created some great conflict. I still feel sorry for it. It never actually kills anyone. On purpose, anyway. There are soldiers under rubble at the temple, but that was after being disoriented by the flamethrower tank. Okay, it does kill two guys at the end.
- Flamethrower tank?! Since when were those a thing?
- Of course it ends in the Roman Coliseum. Where else would it?
- I thought bullets couldn't hurt him?
- Flagrant disregard by the military of a historic building by firing on the Coliseum.
- It ends much like Kong '33. One character asks, "Why is it always so costly for man to move from the present to the future?" It at least hints at the Ymir dying tragically.
- The Ymir was carried by a human like a doll, and now he carries a human like a doll.
- I swear there's a guy in this who looks like Nick Adams.

Commentary by Harryhausen, Muren, Tippett, and Kunert

- The colorization was done by Legend Films. Harryhausen loves it. The film was supposed to be in color, but they didn't have the budget. He shot a bit in color, but the grain was bad, so they switched.
- There's a lot of process photography and back projection in the opening scenes.
- Harryhausen directed the scenes in Italy. Juran hadn't been hired yet. It allowed Harryhausen to finally visit Italy.
- The ship interior was a reused set from *The Caine Mutiny* (1954), starring Humphrey Bogart.
- Harryhausen storyboarded everything to maintain continuity.
- This was made before the launch of Sputnik.
- Early designs for the Ymir were fat and had two horns and one eye. The Kraken was later modeled after him. Harryhausen's father made the ball and socket joints for the armature. One was 8-10 inches tall. Harryhausen still had it at the time (2007).
- This was the first film Harryhausen made that was his idea. It was developed at the same time as *The Elementals*, which fell through. He wanted to go to France. He made a 2-3 page outline and gave it to a screenwriter. The ship originally crashed in Lake Michigan and would've taken place in Chicago.
- The "egg" was made of gelatin.
- Harryhausen supervised the colorization process in 2006, selecting the colors for the key scenes. It took six months to do.
- Most of the stopmotion was done in one take.
- Much the film was shot at Corrigan Ranch.
- It took 7-8 months to do the effects. Harryhausen tried to go for one shot a day. He had no assistant.
- This was the first of three films Harryhausen did with Juran (he called him "Jerry"). Juran was an art director first. He won an Oscar for *How Green was My Valley*. He directed *Attack of the 50-Foot Woman*. He also directed *7<sup>th</sup> Voyage of Sinbad* and *First Men in the Moon*.
- "It took me 50 years to realize 'modesty' is a dirty word in Hollywood."
- Harryhausen said the miniature dog that attacks the Ymir looked terrible, so he did it in shadow.
- Harryhausen went the extra mile matching the lighting to the live-action footage.
- The opening narration was popular at time in films, but not in science fiction. Harryhausen's films used them often.
- The computer literally moved the color palette to follow the characters.
- The net on the armature was a fishnet spray-painted silver.
- Harryhausen trademark: Angular arms (bent elbows). Saves animation and creates personality.
- Harryhausen (likely) cameos in the background as man feeding the elephant.

- They wanted a 15-foot elephant, but they couldn't get one. So, they put a short man in a uniform next to the elephant.
- The car was crushed using a screw mechanism that Harryhausen would pull down.
- "Electrolitic dynamation!" The description used in the PR.
- The ending was filmed at the Temple of Saturn.
- The tank drivers got carried away while filming.

*Remembering 20 Million Miles to Earth (blu-ray)*

- Started with Norse mythology. Decided not to use the name because it sounded too close to a Middle Eastern word for a potentate. Spelled differently.
- Rick Baker said his mother told him they made the Ymir by shaving a squirrel.
- *The Elementals* took place in Paris and had bat creatures hanging in the Eiffel Tower.
- Similar to King Kong in that a creature is brought to our world, mistreated, becomes violent, and dies tragically.
- Harryhausen says a two-legged creature is easier to get personality out of than a four-legged creature.
- He got it to breathe using a blood pressure bag.
- Having the dog attack in shadow encourages the audience to be active. They imagine what happens.
- The car was made of lead.

*The Colorization Process (blu-ray)*

- The color film stock at the time didn't allow him to superimpose his characters.
- The Ymir was painted green by Harryhausen.
- The colorization is done with complex algorithms that moves the color from one frame to the next.

*Tim Burton Sits Down with Ray Harryhausen (blu-ray)*

- People are afraid of the unknown and mistreat the outsider. Like the Ymir.
- Tim Burton, as a kid, tried to find an Ymir at pet stores.
- Harryhausen drew in black and white because the "color would take care of itself."
- Harryhausen briefly mentioned the miniatures in Japanese films. Odd given I'd heard he hated those.
- Harryhausen says he didn't make "horror films." He says people were "brainwashed" into thinking that.

*Interview with Joan Taylor (blu-ray)*

- She was in *Earth vs. the Flying Saucers*.
- William Hopper was the son of famous columnist, Hannah Hopper.
- She married the man who created *Hawaii Five-O*.

*David Schecter on Film Music's Unsung Hero (blu-ray)*

- The A pictures were handled by a variety of composers for Columbia. B pictures usually used stock music.
- Mischa Bakaleinikoff “hired himself” to reuse his own music from his past work. The piece he used in *It Came from Beneath the Sea* called “Mister Monster” in *Earth vs. the Flying Saucers*, here, and again in a Three Stooges film.
- He likes four-note chords.
- The bigger the Ymir gets, the more of the orchestra plays his theme.
- His compositions were simple. He was less-schooled and knew how to use what little resources he had.
- The love theme was derived from a piece in a French film called *The Mating of Milly*. It was also in *It Came from Beneath the Sea*.
- There are 95 music cues in *20 Million Miles*. 49 from Bakaleinikoff. Most films have 25.
- The music piece, “Trial and Escape,” a six-minute piece from the spy film *The Talk of the Town*, was used in this film.
- The music that plays during the rocket crash was originally a piece for a drama, and the piece was called, “Pa Warns Rudolph.” It was about a drunk.

#### *The Ray Harryhausen Podcast, Episode 15*

- The last of three sci-fi films Harryhausen did for Columbia.
- The Ymir is vulnerable; shows Harryhausen acting through his creations. The saucers in *Earth vs. the Flying Saucers* and the sextopus in *It Came from Beneath the Sea* were just set pieces.
- The Ymir is one of Harryhausen’s most popular creations.
- The Ymir is similar to the Cyclops in *Sinbad*—in fact, some of the Ymir’s parts were cannibalized for the Cyclops’s armature to save time and money.
- The homunculus in *Clash* harkens back to the Ymir.
- The Ymir armature was manufactured by Ray’s father, Frederick.
- Harryhausen thought he could get emotion out of a humanoid shape than an animal shape.

#### *Keep Watching the Skies! By Warren*

- Calls it Harryhausen’s *King Kong*.
- It’s pronounced “ee-mur.” It’s the name of the primeval father of giants in Norse mythology.
- Says people always thought it was a man in a suit when he was growing up (how’d they break the actor’s legs?)
- The Sicily scenes were filmed in Sperlonga, Italy.
- He complains that the creature’s design makes no story sense, especially if it eats sulfur.
- He complains that there should’ve been a relationship between the scientist and the Ymir.
- He calls the script “weak.” He argues that Harryhausen’s work was hampered by this and low budgets.
- He says the Ymir has no personality.

## TOKU TOPIC: The Soviet Side of the Space Race

- Learn more in episode 15 of MIFV (*Battle in Outer Space* w/ Luke Jaconetti).
- “Both the Americans and the Soviet Union started satellite development shortly after World War II, according to Russian space expert Anatoly Zak on his website, Russian Space Web. The satellite projects took place under the backdrop of the Cold War, a lengthy time — from the late 1940s to at least the late 1980s, historians generally say — when relations were tense between the Soviet Union and its allies and the United States and its allies (including the North Atlantic Treaty Organization).”
- After WWII, both the U.S. and USSR scooped up German scientists who helped each of them develop rocket programs. “The United States' most famous German engineer was Wernher Von Braun, who later was chief architect of the Saturn V rocket that sent Apollo astronauts to the moon between 1968 and 1972.” The Soviets got an edge using German V-2 rocket technology.
- “In the United States, satellite development started as early as 1945, when the Navy's Bureau of Aeronautics began working on a satellite design to send aloft scientific hardware; a year later, the RAND Corporation (under commission from the Air Force) began research on a "World-Circling Space Ship" that could have taken a satellite into space as early as 1951, Zak wrote. However, Zak added, the U.S. administration initially had "little enthusiasm" for such projects, because they "were resting on the laurels of perceived air force and nuclear supremacy in the Cold War with the USSR.”
- The Soviets rocket program continued in the 1950s while getting little attention under Mikhail Tikhonravov, who developed the NII-4 rockets, along with the famous rocket designer who just got out of the Gulag, Sergei Korolev (who was inspired by the work of Konstantin Tsiolkovsky, the pioneer of calculating rocket fuel). After Stalin died, the program received great support from his successor, Nikita Khrushchev, who wanted to use the rocket program to assert superiority over the U.S.
- “The Soviet Academy of Sciences and several Soviet ministers formally approved the satellite program in 1954, laying the groundwork for more focused development, Zak said. The satellite project received even more support after U.S. President Dwight Eisenhower announced in 1955 that the Americans would send a satellite into space during IGY, which lasted from July 1, 1957, to December 31, 1958. The Sputnik project was formally approved by the Soviet ministry on Jan. 30, 1956, also receiving the personal approval of Khrushchev a few weeks later. The Soviets continued refining their design for launch on an R-7 rocket.”
- The Space Race started Oct. 4, 1957, with the launch of Sputnik by the USSR. (Just four months after the film was released). While President Eisenhower responded to this five days later in a press conference with “casual indifference.” However, this beach ball-sized satellite shook the Americans’ sense of postwar technological superiority. Even so, it wasn’t built to last long, so it was a compromised satellite.
- The name of the Russian space program is Roscosmos. It’s one of only three space programs with launch capabilities (the others being NASA and the European Space Agency).

- “Despite an enormous lack of funding, time pressure, and an inability to test hardware prior to launch, Korolev was determined to launch a payload to the Moon. On January 2, 1959, The Luna 1 mission reached the Moon, but flew past instead of impacting it, which was the intent. (It missed by less than 6,000 kilometers.) On September 14, 1959, Luna 2 succeeded: becoming the first human-made object to arrive on the Moon.” “Less than a month later, Luna 3 took the first photograph of the Moon's far side.”
- Schreve argues that the Space Race fostered a cordiality between the U.S. and USSR during the '60s. In fact, President Kennedy congratulated Chairman Nikita Khrushchev on the Soviet Union launching a probe to Venus Feb. 13, 1961. Despite tensions and competition, both governments stressed the human achievement and advancement of space exploration.
- Secretary of State John Foster Dulles saw Sputnik as Soviet propaganda that would chip away at US prestige. A counter-launch couldn't be done immediately, but after the launch of Sputnik II (Nov. 3, 1957, which had a dog named Laika on board, although she was nicknamed “Muttnik” in the U.S. Sadly, she died during re-entry) and the fiery failure of the U.S. satellite, Vanguard I, Dulles used the Sputniks to frame the Soviets as “the chief war makers in the world” despite them being used for scientific purposes.
- However, after the initial panic and some success in their own space program, the U.S. attitude softened. President Kennedy urged the country and the USSR to “explore the stars” together, in his first State of the Union, advocated for cooperation with other countries—including the USSR—in exploring space and sharing knowledge.
- During Kennedy's presidency, he and Khrushchev exchanged many congratulatory telegrams concerning space exploration, especially when Yuri Gagarin became the first man to orbit Earth in April 1961. It was something of an avenue for peace and dialogue—and then the Bay of Pigs happened.
- “Beginning in 1958, Korolev began undertaking design studies for what would become the Soviet Vostok spacecraft: a fully automated capsule capable of holding a human passenger in a space suit. By May of 1960, an uncrewed prototype was launched, orbiting the Earth 64 times before failing re-entry. On August 19, 1960, two dogs, Beika and Streika, were launched into low-Earth orbit and successfully returned, marking the first time a living creature was launched into space and recovered.”
- In response to Kennedy on Gagarin, Khrushchev said, “I express the hope that the Soviet Union and the United States may work together on the matter of mastering the universe, considering the mastering of the universe is a part of the great task of creating peace without armaments of war.” However, warm precedential these exchanges were, there was still some competition and pride, as seen in Kennedy's famous “Space Challenge” speech.
- “Then, they sent the first woman in space (Valentina Tereshkova, 1963) and did the first spacewalk, performed by Alexei Leonov in 1965.”
- The International Geophysical Year (IGY) was an organization started in 1957 that featured 60,000 scientists from 66 countries—including the U.S. and USSR—dedicated to studying space. The USSR proposed the creation of a UN space program to the General Assembly, but the U.S. shut it down. However, they did form the Committee for

the Peaceful Uses of Outer Space in 1959 to help the IGY. It also led to the passage of UN Resolution 1721, which basically said outer space was subject to international law and no country could lay claim to it.

- Tensions mounted in 1963 when reconnaissance satellites were to be launched. The Soviets saw this as espionage while the U.S.—through Senator Albert Gore Sr.—argued that “military activities in space cannot be divorced from the question of military activities on earth.”
- “Disaster struck the Soviet program and gave them their first big setback. It happened in 1967 when cosmonaut Vladimir Komarov was killed when the parachute that was supposed to settle his Soyuz 1 capsule gently on the ground failed to open. It was the first in-flight death of a man in space in history and a great embarrassment to the program.”
- The Superpowers signed the “First Memorandum of Understanding” (a plan of cooperation on weather satellites) in 1963 with the help of NASA rep Hugh Dryden, which came to fruition in Jan. 1964 with the launch of U.S. weather satellite Echo II. This paved the way for the joint Apollo-Soyuz missions in 1972 and later the International Space Station.
- Eight more Sputniks were launched in the coming decade.
- Korolev hoped to send cosmonauts to the Moon in October 1967 to mark the 50<sup>th</sup> anniversary of the Bolshevik Revolution. However, he died of colon cancer complications in Jan. 1966, and his successors were unable to continue his work. The Moon program fell apart.
- “The Soviet Union and the United States also developed human moon programs, but the Soviet Union abandoned the effort after several failures of its moon rocket, the N-1. America's Apollo 11 touched down successfully on the moon's Sea of Tranquility on July 20, 1969, and Neil Armstrong was the first to alight on the surface. Meanwhile, the Soviet Union launched the first space station, Salyut 1, on April 19, 1971, and developed expertise in long-term spaceflight across several space stations — most notably, space station Mir of the 1980s and 1990s. Russian cosmonaut Valery Polyakov set a record on Mir for longest consecutive stay in space from January 1994 to March 1995, racking up 438 days.”