

## AirSpace Season 1, Episode 16

### Rocket Man

Nick:

Hello, and welcome to airspace from the Smithsonian's National Air and Space Museum with help from PRX.

Emily:

I'm Emily, a planetary geologist.

Matt:

And I'm Matt a space historian.

Nick:

And I'm Nick a writer here at the museum.

So we are not by trade film critics, but I guess we maybe critic adjacent.

Emily:

Three non-professional critics should probably make what, one half official critic.

Matt:

You do know I've published film criticism.

Nick:

Oh, okay. No, no back up. So it turns out that Matt is officially a film critic.

Matt:

Yes.

Emily:

No. He said he's a space historian. That is not the same thing.

Matt:

All right. I'm not a... you know.

Nick:

Okay. Well...

Matt:

It's my side hustle.

Nick:

Okay. But the point is that there's a big, important new space movie this fall First Man. So it's about Neil Armstrong from roughly the time he was a test pilot for NASA, until he landed on the moon and returned safely to the earth spoilers, by the way, spoilers. Neil Armstrong walks on the moon in the end of the movie [radio: I'm going to step of the LEM now—that's one small step for a man, one giant leap for mankind], we want to talk about what the movie got right.

Emily:

And we want to give a little more context about the time, the places, the historic figures that don't really get a full treatment in the film.

Matt:

And I mean, Nick called them spoilers, but I think it's fair to say that knowing about the stuff that we're going to talk about will actually make the film better.

Emily:

This film stars, Ryan Gosling as Neil Armstrong and Claire Foy, who, if you don't know the name, you might know her from the crown who plays the Queen. And she stars as Neil Armstrong's wife, Janet, sometimes called Jan. And the film doesn't make an awful lot of time for any other historic figures that you might expect to see or hear about in this movie.

Matt:

In my read on it it's a very intimate portrait. I think the title really kind of speaks to that it's First Man, that we tend to talk about Apollo as an incredible technological triumph. A lot of teamwork and management went into putting that thing into space, but at the end of the day, or for those couple of hours on the moon, it was a man in a suit walking around on the moon. So we get to know who that man was and what thoughts he might've brought with him.

Emily:

This goes from 1962 to 1969.

Matt:

Yes.

Emily:

So just a really short period of his very accomplished life.

Matt:

The First Man is based on a book by space historian, James Hansen, if Armstrong as a person, if his sort of personality, his humanity really shows up in this movie, it's because of the hours and hours that Hansen spent interviewing Armstrong and family members to write that book.

Emily:

Here's James Hansen talking about his book on C-SPAN back in 2005.

James Hansen:

If I did not ask Neil Armstrong a question about something, I would never have heard about it because Neil never told me let's talk about this, or let's not talk about that. I thought that Neil's own story was more important to tell than continuing the mythology that was there.

Nick:

The movie opens with Neil piloting the X-15, the X-15 was an experimental program that he was involved in with NASA before he became an astronaut. And it's one of those things that if you know what the X-15 is, it's really cool and well done, but then the movie doesn't actually talk about it at all.

Emily:

Actually, can you guys describe what this plane looks like? Because it doesn't look like what you would expect a really fast airplane to look like.

Matt:

Yeah. So it remains to this day, the fastest plane ever built. It was not an air breathing plane. It was a rocket plane.

Emily:

What do you mean an air breathing plane?

Matt:

Well, I mean your conventional jet engine breathes air in order to combust the fuel.

Emily:

Okay. So a little bit, if you've seen the right stuff, it's a little bit like that...

Matt:

Bell X-1.

Emily:

A little orange plane...

Nick:

A couple years down the road.

Emily:

In my brain it looks like a glider, right? Because it doesn't have that sort of it doesn't take off. It gets dropped out of the belly of a bigger airplane.

Matt:

I think starting with that X-15, that was really cool for me to see what it would look like to actually be piloting the X-15 and all of this sort of noise and the motion of the plane itself.

Nick:

Some of the pilots of the X-15, not Neil Armstrong, but some of the pilots went high enough during their X-15 flights that they were later given astronaut wings. They earned their space wings by flying an airplane.

Matt:

I see that plane hanging in our museum almost every day when I come in. But it's not very often that I actually get a sense of what it actually was like to fly that plane.

Emily:

True confessions, no idea what that plane was until I saw First Man. I always saw the plane cause it's right there. You see it. It is right there. Walk by that thing a hundred times, no idea.

Nick:

The first few scenes focus on Neil's time as a NASA test pilot, which was also when his daughter, Karen was very ill with a brain tumor, which eventually took her life.

Emily:

There's a very cool scene where you see Neil Armstrong really trying to find a way to help his daughter. And I think it really highlighted the way his brain kind of worked and how he approached problems. Trying really hard to sort of science it.

Nick:

The movie is really about this intense compartmentalization and in some ways very effectively, but also sort of to the exclusion of a lot of space history.

Matt:

Yeah. The focus of this film seems to be a lot on the sort of losses that Armstrong experienced during the Apollo program and in the lead up to it. And one of the losses that did make it into the film was the loss of his friend, Ed White, who was also in the Apollo program.

Emily:

Can we, can we put Ed White into some context if we're not familiar with the space program.

Nick:

Ed White was in the Apollo 1 fire and by all accounts, Neil Armstrong's best friend.

Matt:

Well, in fact they lived across the street from each other.

Nick:

Next door.

Matt:

Next door.

Nick:

They bought land together so that they could build their houses together.

Matt:

One of the things that's left out of the movie is that Ed White actually helped to save the Armstrong's children when the house caught on fire, right? That fire is not in the movie.

Nick:

Jan Armstrong's account is that Ed White leaped over a six foot fence without touching it. Neil Armstrong says he went through the gate. So Ed White was the first American to walk in space during the Gemini program, during the Gemini program, Gemini 4.

Emily:

And Neil Armstrong after he was a test pilot became an astronaut on the Gemini program.

Nick:

Yes.

Matt:

That's right.

Nick:

NASA is really great at naming things sometimes a Gemini is really evocative. Gemini refers to the fact that there were two people on the spacecraft. Now the entire premise of the program was rendezvous and docking, which requires two separate spacecraft. But the program was originally called Mercury Mark 2.

Emily:

Oh, nooo...

Matt:

The main objectives of the Gemini program were really the heart of the action of most of this movie. So rendezvous, just meeting with another spacecraft in space docking where you actually lock up with that other spaceship and then EVA where you're out of the vehicle in a space suit in the dark emptiness of space.

Emily:

I haven't heard a lot of criticisms about this film in particular, but I think one of my biggest is that the history of missions or programs like Gemini and some of the other events that they highlight in this film are actually really pretty confusing as they lead up to the Apollo mission. If you are somebody who doesn't kind of already know the order in which these programs occur and the importance of each one of them. I'd always heard of Gemini, I always kind of knew it was between the Mercury program. And it kind of led up to the Apollo program. I think this would have been really confusing if you're somebody who doesn't hang out with a bunch of space buffs slash historians.

Matt:

Slash dorks.

Emily:

Slash dorks.

Nick:

Doesn't everyone hang out with space buffs slash historian slash dorks?

Emily:

No, no. Just us, just us guys, just us. So the Gemini program was all about really trying to figure out how to do all of these different maneuvers in space that were necessary in order to actually start sending missions to the moon and putting people on the surface.

Nick:

It was your orbital driving test. You had to parallel park, you had to...

Matt:

The Gemini scenes really demonstrated to me why, even though it'd be great to see the Earth from space and all that, that'd be fantastic. I do not want to be an astronaut. I mean the hardware and the roughness of the testing, this new equipment just seems totally overwhelming to me.

Emily:

Gosh the whole way this thing was filmed really highlighted for me, why I don't want to be an astronaut because a big part of this movie is the visual impact of trying to give you the sensation of being in what feels like a tuna fish can rattling around with some pennies inside and your head kind of bobbing around and the noise. And while I appreciate that they were trying to make that as part of your visual experience, I was really uncomfortable and I know that that's maybe what they wanted me to feel, but I didn't enjoy that.

Nick:

Early in the movie, I was really taken by how effective that was during the X-15 flight during the Gemini launch.

Emily:

It's exhausting.

Nick:

It was a lot, the filmmakers used 16 millimeter cameras inside all of the spacecraft to give it kind of a grainy, claustrophobic feel. They really bent over backwards to get it technically accurate. Like he pushes the right switches.

Emily:

Did they build those for this movie? Or were they using some kind of flight spare that they were granted special access to?

Matt:

No, they built them. They base them on the real hardware, but you know what, one little inaccuracy that I want to point out because it's actually kind of interesting with the hardware is that when Armstrong and Aldrin were landing the lunar module on the moon, you see in the film that there's an alarm...

Nick:

Spoiler.

Matt:

...that keeps going off and it lights up, it lights up red and you hear a sort of really annoying alarm sound. The truth is that there was no sound for that alarm, but they added a sound to kind of heighten the drama. But do you know what that alarm meant?

Nick:

I do.

Emily:

The 12:02?

Matt:

It was the computer telling them, look, I'm over tasked and I'm not doing everything. Let's just hope for the best.

Nick:

I am a walking 12:02 alarm just all of the time.

Emily:

And the computer being what, like what you had on your graphing calculator in college?

Matt:

Right. So it's the guidance computer for the lunar module, which compared to today's computers. You know, it's not that sophisticated. Today, it wouldn't really compete with what we have available.

Nick:

So the hardware was really accurate. The procedures were really accurate. The cinematography is really shaky. The visual style of the film was extremely effective I thought. I was watching it and clicking through Life magazine photos in my head that I knew I had seen that were, I thought the basis for several of the scenes, like how the living room was laid out, what everybody was wearing, just kind of the overall feel of the home life of the Armstrong family in the 1960s. I went back and checked. Yeah, there are a lot of outfits that they just, they just completely recreated from Life magazine photos.

Emily:

When we envision what an astronaut looked like in the 1960s, it's a lot of what, like white colored short sleeve shirts with some black ties. I mean, they kind of look like that traditional NASA person. Because they're really focusing on Neil Armstrong everybody else who's part of the space program at this time who was really important for the success of this program, fall away into the background and really kind of present this very uniform look to everybody else.

Matt:

I think that the film could have benefited from just sort of taking a step back and looking a little bit more at the people around Armstrong, like the other astronauts and even giving Jan a little bit more of a chance to be a full person in this movie.

Nick:

I agree. They seem to use Buzz Aldrin a lot just to set up Neil Armstrong as this super level-headed guy. And Neil was super level-headed and Buzz could be famously focused and ambitious, but not necessarily in the way that they showed in the film.

Matt:

Yeah, I agree. And I also feel like they, they made it seem like Buzz just was sort of dropped in to the program and benefited from the deaths of other astronauts before riding on Apollo 11. And that's not true at all. Buzz had a PhD in orbital mechanics and he played a pivotal role in how rendezvous and docking would work.

Nick:

And UVA.

Matt:

And DVA. And he played a much larger role, not just as sort of a de facto antagonist to Neil.

Nick:

Right. And apart from Ed White, he's one of the only other astronauts that really has a lot of personality. I can't tell the difference between Jim Lovell, who would later be the commander of Apollo 13 and was the backup commander of Apollo 11 and Michael Collins command module pilot of Apollo 11. The writing is really not on the wall with those characters.

Emily:

I agree that that's kind of a huge downer because there's a lot of missed opportunities. When you think about what the fundamental theme and message of this film is, you can kind of see why they made that choice.

Nick:

They portrayed one astronaut as an individual to the sacrifice of every other astronaut's individuality.

Emily:

Well, and it's just, but it's a story about one person rather than a story about, I mean, I would argue that this isn't a story about the lunar landing.

Nick:

I would agree.

Matt:

No, it's about that one man. The first man. So it, the decisions make sense in that context, but I think it's still okay to feel like other people got a little short changed. These were real historical actors.

Nick:

So the other astronauts are by and large missing. What else isn't in this movie that people should know about if they see this movie and love it and want to understand more about the era, what's not here.

Matt:

One of the questions I think we struggle with in space history is how does Apollo fit into the larger context of the US in the 1960s? Or can we really reconcile it with everything else that was going on. And this film just kind of isolates it on its own without really touching it with those things, except for one montage.

Emily:

They reduced a lot of important things into one what?

Nick:

60 seconds.

Matt:

Yeah. It's very short. That montage does convey a lot about, what people were feeling outside of the Apollo program. Trying to figure out what it meant that the US was doing this at a time when there was incredible racism and poverty and other things that people were trying to deal with. I mean, very famously Ralph Abernathy, who had inherited Martin Luther King's ministry after King was assassinated, he came to Kennedy space center and demanded a meeting with the NASA administrator, Thomas O. Paine, who did meet with him. And they talked about these issues and Paine told him, look, if I could solve these problems by not pushing the launch button, I wouldn't push that button.

But there's no way of actually making those problems go away just by canceling this launch. So Paine as, as part of his effort to, to come to terms or make peace with, with what was going on out there sent a bus to bring families from Abernathy's group to the VIP section and watch the launch. Now it'd be difficult to put that into this movie. Instead, it got condensed into a montage where we get that sentiment from the very famous poem or song by...

Nick:

Gil Scott-Heron.

Matt:

Gil Scott Heron exactly.

Gil Scott-Heron (Recording):

A rat done bit my sister Nell. (with Whitey on the moon) Her face and arms began to swell. (and Whitey's on the moon) I can't pay no doctor bills. (but Whitey's on the moon) Ten years from now I'll be paying still. (while Whitey's on the moon) The man just upped my rent last night.

Nick:

The movie clearly zoomed through a lot of cultural context. Matt, do you think First Man did a good job, a good enough job to convey the scope and complexity of the Apollo program and the overall space program?

Matt:

Oh yeah, absolutely. I mean, we see very small pieces of it, right? We don't see all of the people who worked on Apollo, but when you're with Neil Armstrong on the elevator, going up the gantry to the rocket and you see just the scale and you see the words United States of America there on the side of the rocket and the American flag, you get a real sense of how big this was and how much of a national priority it was.

Nick:

So that brings us to the end of the movie where spoiler, when he arrives on the moon, in the film, he walks over to what's called east crater and tosses something of Karen's into the crater while having a private moment reflective of his daughter, did that happen Matt?

Matt:

We don't know it is a speculative moment. It's something that his sister actually speculated about in her interviews with Hansen, where she said, she sort of hoped that Neil had done something on the moon and not told anyone about it to commemorate his daughter.

Nick:

But he did walk over to a crater very far from the limb that was unscheduled during the EVA. Neil Armstrong and many astronauts always famously declined to say what they had taken to the moon. There's a pouch that they have. It's called a personal preference kit, a PPK, according to Hansen who wrote First Man, the book on which the movie is based. He asked Neil Armstrong for his PPK list. And Neil said that he had lost it. Hansen later found out that the list was included in papers that Armstrong had donated to Purdue University, but those particular papers are sealed until 2020.

Emily:

Wait, why are they sealed?

Matt:

It's a pretty standard thing. When people donate their papers to an archive, they will put sort of seals on when things can be revealed to the public. There's not usually a great rationale for why they do it, just to kind of keep their privacy for some time after the donation.

Nick:

Sometimes has to do with surviving members of the family and things like that.

Matt:

Whether or not he actually dropped the, the bracelet into the crater. I love that scene. I think it's a sort of visual metaphor for taking a moment thinking about what's important to him, the first man to have set foot on the moon, thinking about the enormity of that moment, but also how that fits into his life and the people who he loves and cares about. I am totally willing to believe and hope that he did take a moment to think about the people that he loved back on Earth.

Nick:

Sitting down now to talk about the movie. I like it more than I did when I walked out of the theater.

Emily:

I liked the movie. I think the way in which it was filmed was really distracting for me. I think maybe I'm just a little bit too sensitive to being motion sick.

Matt:

I think it's incredible that we've waited 50 years for the first Neil Armstrong biopic.

Emily:

I'm also at this point where I think I want to hear a different kind of story. And so it wasn't really scratching the itch.

Matt:

I agree with you on that a little, because I mostly want to see movies about the space program that show me unfamiliar aspects of it. People that we haven't heard of before.

Emily:

And I think it was a great movie. It's just not what I was kind of hope...It's not the movie I wanted to see made.

Matt:

Did you know that Neil Armstrong and Buzz Aldrin were thinking about opening up a restaurant on the moon?

Emily:

Was it going to be space themed?

Matt:

Of course, but you know, the critics said that they were sure that the food would be great, but they were worried about the atmosphere.

Emily:

Oh no, I can't. I can't even laugh. I'm not even sure. That's dad joke quality.

Nick:

They should have opened a space bar instead if they were.

That's it for this episode of Airspace, we'll be back in two weeks. Airspace is produced by Katie Moyer, Jocelyn Frank and Lizzie Peabody mix by Tarek Fouda, special thanks to Jason Orfanon and Genevieve Sponsler and John Barth.

Emily:

Check us out on Instagram @AirspacePodcast. No halfway through that, I was like, Matt's got this twinkle in his eye. All of a sudden I was like, oh-oh, I had this feeling in my stomach. I was like, there's going to be a really, there's going to be a groaner on the other end of this.

Matt:

Ah well.

Speaker 6:

From PRX.