

## Sidedoor

### Episode 2: Special Delivery

TC: You are listening to Sidedoor, a podcast from the Smithsonian. I'm Tony Cohn and the theme for today's show is special deliveries. We're going to bring you three stories about how sometimes the way something is delivered makes all the difference. To the prenatal care of teen moms at the Zoo to the power of making yourself the punchline. Alright, I'm going to turn it over to my co-host Megan Detrie. Talk to me a little bit more about where we go in this episode.

MD: So for this episode I went on the hunt for some really good jokes. And that actually took me to the back hallways of the National Museum of American History, where we learned all about Phyllis Diller's meticulously organized joke files. And then, we go across town to the National Zoo, ah, to go behind the scenes at the Great Ape House, where we were warned as we entered that the smell was going to be...very...pungent.

TC: Wow, you're so polite.

MD: It lived up to it for sure. And there we met a pregnant and kind of ornery orangutan, who frankly spat at me. I still kind of like her.

TC: Alright, as much as I kind of want to get to the spitting on you part, let's leave the orangutan alone for a minute and focus on our first story.

TC: You've probably heard of drone delivery, right? This idea that Amazon or some other big company will be able to send packages to your doorstep using a little flying drone. No more waiting days for your shipment ... just hit the order button and stand outside a couple of hours later and BAM! Your new rice cooker gets dropped from the air right into your hands.

That sounds like science fiction, but that kind of high tech, lightning fast mail delivery has been tried before... half a century ago... by the regular old post office. And instead of tiny robot helicopters, they were using... I kid you not... cruise missiles.

I promise this was less dangerous than it sounds. I got Frank Winter on the phone to tell us about it.

FC: My name is Frank H. Winter. That's winter, like summer... winter.

TC: Frank used to be the curator of rocketry at the National Air and Space Museum.

FW: I want to start with a basic definition. Rocket mail is the delivery of mail by rocket, and the rocket lands by deploying a parachute prior to its landing so that the landing will be soft, the mail therefore will be protected.

TC: Of course, there were other dangers, too...

FW: Throughout the history of rockets, rockets are invariably unpredictable, explosions and other mishaps have often occurred.

TC: But that didn't stop the post office from trying to use the latest rocket technology to make speedy deliveries in the 1950s. In October of 1957, the Russians launched Sputnik 1, the world's first artificial satellite into orbit. As the public freaked out that Russia's technology was way ahead of the United States, one government official came up with an inventive show of force. Postmaster General Arthur Summerfield wanted to use missiles to deliver the mail.

FW: Now interestingly, at that time the postmaster General Summerfield was very much taken with the idea of international rocket mail, and saw it as highly promising.

TC: On June 8, 1959, the USS Barbero submarine left its dock in Norfolk Virginia to deliver a very different kind of payload -- a Regulus cruise missile packed with U.S. postal mail. The Regulus 1 missile was built to carry a 3,000 pound warhead, and could fly up to 500 miles. At the time, several submarines had been outfitted with the technology. These missiles looked like a fighter aircraft without the cockpit. And the size of an orca.

Voice: The Navy developed the Regulus. This system required the submarine to surface, disengage a cumbersome launching pad and then fire the air breathing short range missile.

TC: However, this particular missile's warheads had been swapped out with two metal boxes containing three thousand letters. The letters all had commemorative envelopes and were addressed to important government officials, including President Dwight Eisenhower. And each one of them had an identical message written by Summerfield:

"Your receipt of this letter marks a milestone for communication between people's of the earth. I believe we will see missile mail developed to a significant degree before man has reached the moon."

The submarine surfaced off the coast of Florida and launched the missile just after 9 am on June 8th. The crew on the Barbero manually guided the missile until they lost sight, and then the planes chasing it took over navigation. It flew 100 miles in 22 minutes and landed in Mayport, Florida where it was towed in to meet the postmaster. They didn't announce it until afterwards, but newspapers quickly picked up the story. And hundreds of stamp collectors wrote in wanting to get their hands on memorabilia. But despite the fanfare, rocket mail was not to be.

FW: These experiments were little more than stunts.

TC: The missiles couldn't carry enough mail to make using them actually worth it. It was impractical, expensive... and kind of silly. Once the missile landed, the mail still had to go to the post office in Jacksonville for regular sorting and delivery.

Plus there was always the risk that it would crash, go off course, or, as had happened in the past experiments, blow up. It only took a week for officials to say they had no plans to try it again. While definitely the most high profile, this was not the first time someone had attempted to deliver mail by rocket.

FW: The actual practice of them dates from the 1920s to the 1930s. That was really the great heyday of rocket mail, when it was an international fad.

TC: It all really began in Germany. In the late 1920's, Germans were doing all kinds of rocket stunts...

FW: Rockets propelled cars, boats, even a rocket propelled sled.

TC: And it sparked over experiments in Austria, India, and England. In the U.S. there was the first interstate rocket mail, and the first international rocket mail. But it all had mixed results. Rockets fizzled. Mail caught fire. People wound up hospitalized. One rocket crashed into a popular bar just over the border in Mexico.

FW: Rocket mail was considered at that time a potential viable application of rockets on earth but they turn out to be very impractical, unsafe for a number of reasons they were always unpredictable, there were too many failures, too many explosions... total unpredictable.

TC: In the end, rocket mail was just another cool idea that couldn't work in reality. And aside from a handful of stamp collectors who happily shelled out money to add rocket mail envelopes and stamps to their collections, there was little lasting value. But it definitely captured the public's imagination... even if it never really took off.

TC: Okay, now we're going to get really, really literal about the term "special delivery." Right now, at the National Zoo, there's a pregnant orangutan. The zoo hasn't had an orangutan birth in 25 years, so the keepers are going to some very special lengths to make sure everything goes smoothly.

<SFX of the veterinarian checking for the baby's head on an ultrasound>

MD: That is an orangutan getting an ultrasound. Her name is Batang, and she's one of six orangutans at the zoo. This 90 some pound primate has grown a noticeable baby bump. She's pressing her belly up against the mesh enclosure so her keeper, Erin Stromberg, can rub an ultrasound probe across her belly.

ES: Batang has to assume the position. And this position right now is with her very long arms as high as she can up above her and then one of her legs is

usually up, but we are going very low in her abdomen below her belly button— orangutans do have belly buttons— which serves as a landmark for us. And the ultra sound probe goes through the enclosure onto her abdomen.

MD: Erin periodically feeds Batang grapes, as another keeper, Amanda Banyia, holds a laptop so the vet can check out the images.

<SFX: There's a heartbeat! There's a heartbeat! Yay!>

MD: They call the fetus "she" as they watch it move, but, they don't know the sex.

TC: This is Batang's first pregnancy. And the zoo WANTS it to work out. In the past 75 years, the number of orangutans in wild has dropped 80 percent. Bornean orangutans like Batang are endangered.

MD: The plan is a studbook of orangutans in North America. And it does some serious matchmaking. If you thought OkCupid's endless questions were invasive - - you would not last long at an orangutan mixer. The plan looks at species, genes, personalities, which zoo houses them. The goal is to retain genetic diversity. Over a decade ago, the species survival plan found Batang's match, Kyle; an adolescent orangutan at the Topeka Zoo in Kansas. And so, when Batang and Kyle turned eight... the age when orangutans separate from their mothers... they both moved to the National Zoo. Orangutans grow up incredibly slow. For the first two years of life, the baby orangutan continually clings to his mother. Some are carried until they are five years old, and breastfed until eight years. The species survival plan says orangutans can start breeding at 14, but the Zoo wanted to wait a little longer. They needed to be sure Batang would be ready to care for a baby.

This is Amanda.

AB: When that birthday rolled around we kind of took a lot of things into consideration. The biggest one was her social maturity and her emotional maturity, if you will. I think all of us we a little uncomfortable and said, "I think she needs more time to grow up a little bit more."

TC: Orangutans are incredibly intelligent animals. They have memories and critical thinking skills. In the hot, summer months, the zoo gives them the option of pressing a button to turn on a water mister in their outdoor enclosure. There is also a second button, that, when pressed, sprays visitors standing outside. On busy days, that button gets a lot of use.

MD: Like many teenagers, Batang loves attention -- good or bad. She likes to stay busy, which makes her great at the enrichment training the zoo provides, but also means she gets into to plenty of mischief. Her other keeper, Erin, describes Batang as a...

ES: A very, sometimes if you wanna say, dramatic animal. Um, I remember very soon after she came here to the Zoo, so she was a tiny little thing, I think she was about 70 pounds and she was about eight years old, and she was playing with a toy and there was a rough edge and there was the tiniest little nick on her finger. And she proceeded to make sure that I saw her finger every second of that day.

MD: And then there's Kyle and the always-complicated world of young love. It turns out hitting puberty can be awkward, even for apes.

ES: They're teenagers and unfortunately male orangutans go through an incredible growth spurt in their late teens. So they go from looking like a female and being the friend to the other females to growing the long hair, developing the large cheek pads which are all the characteristics of an adult male.

TC: Kyle's growth spurt was quick and intense.

ES: He gained about 75 pounds in six months, he grew the really long hair, got the cheek pads, started making the long call of the male.

MD: Kyle was theoretically ready to go and two years ago, the Zoo took Batang off birth control. But neither of them was interested in the other.

ES: Sure their genes match up, great, but personality-wise maybe this isn't going to happen. He was in rare form for quite some time and I believe that Batang saw her friend, and was like, "Ugh, I might, ehh. I don't know what to do with you right now."

TC: It took years before the couple finally hooked up at the right time. Orangutans are somewhat solitary animals. Males tend to range around, spend a few days with a female and then move on. They're also kind of picky, and Kyle and Batang were not each other's first choice. But in February, a pregnancy test confirmed it: Batang had a bun in the oven. And, like any pregnant female, Batang has her down days. When we went to interview the keepers she refused to enter the enclosure until most of the staff had left.

AB: I'd say from week two or three, through about week 12 or 13, we saw a lot of behavioral changes with her. Pretty similar to things you would kind of see with a human woman. So a lot of mopiness in the morning; unwillingness to get out of her nest. Another lovely side-effect that I think maybe listeners can relate to, she had a lot of constipation in that first trimester.

TC: So you can't just bring her a pint of Ben & Jerry's and call it a day?

ES: Our nutritionist is saying no.

TC: Keepers have been working with Batang to prepare her for pregnancy since before she ovulated. She's trained to pee in a cup so they can check hormone

levels and present her arm for blood draws. But three years ago, it became time to teach her to be a good mom. She gets treats for holding the baby upright, grapes for placing the animal in a baby box at the side of her cage so that vets can examine the new born, juice for tolerating tugs on her fur. Most remarkably, Batang is also being trained to use a breast pump for milk. That way, if she can't nurse the baby can be bottle fed. This is Amanda again.

AB: Hopefully instincts kick in and we won't have to use any of these kind of backup plans. If she leaves that stuffed baby aside and comes over and is interested in what I'm doing and leaves the baby on the ground, I'll say, "Oh, no, no. Go get your baby." And she'll you know, go and pick it up and bring it with her, and carries it around with her, and she gets small rewards for that.

MD: All of this training increases the likelihood that Batang will care for her infant. First time mothers have a higher rate of not raising their own. And Batang was partially nursery-raised, which makes it even more complicated.

AB: Apes that were not raised by their own mothers tend to also not be necessarily right off the bat the best mothers. That said, there's a lot of variability within that. So basically we're preparing for all of the possibilities.

MD: They're also hoping the some of the orangutans will pitch in. The keepers are training two other females -- Bonnie and Iris -- to act as surrogate mothers. Their training is pretty much the same as Batang's except they are being taught to present the fake baby to the keepers for bottle feeding. Between Batang and the surrogate moms the Zoo wants to make sure the baby always has someone to cling to. Literally. Here's Erin again:

ES: We want that infant on an orangutan. It's going to learn the behaviors from the orangutans and from the other orangutans here at the Zoo. Orangutans ... are highly trainable, highly intelligent animals, that it's really not so much do we need to do this? It's that we can do this...if we can train things that are helpful, why not?

MD: As the National Zoo prepares for this new little bundle of joy, Batang gets ready to take on her biggest project yet: Motherhood.

TC: Sometimes it's all in the delivery, especially if you're the legendary comic Phyllis Diller. Throughout her nearly half a century long career, Phyllis used humor to debunk myths about women's roles in society. She retired from comedy in 2002 and passed away at the age of 95 in 2012. Soon after she retired, Phyllis donated her card catalog of jokes to the Smithsonian. Her Steelmaster filing cabinet contains 48 drawers holding over 50,000 index cards. On each card is typed a joke. She called it her "gag file." Dwight Bowers, the curator emeritus of pop culture at National Museum of American History, let us try out a few of her

jokes on our own. On a scale of 1 to embarrassing, this is like a 10, but here's a clip of me giving it my all:

TC: I overheard two generals talking. One of them said you take the left flank and I'll take the right. They were in a butcher shop!

DB: Phyllis Diller was an amazing comedienne primarily because her comedy paralleled the rise in women's movement at the time. She was debunking the myth that women were just totally created to be wives and mothers. And, to do that on the stand-up comedy floor, to use that as her platform was quite unique. She was doing with comedy, what Betty Friedan was doing with social history.

MD: Betty Friedan was a women's rights activist, who pushed for women to find fulfillment beyond traditional roles. And while Phyllis's stage persona played up a traditional role -- the housewife --- she was no domestic goddess. She wore unkempt wigs, intentionally garish, shapeless costumes and carried a cigarette holder with wooden cigarette. Her jokes were self-deprecating and sassy.

DB: She always looked sort of like, an unfinished painting. Her look always underscored the fact that she was joking about the role of the women. The fact that women did not have to be perfect homemakers did not have to be perfect mothers.

<SFX\_Diller's performance>

DB: Her delivery was done very much at rapid fire. That was the whole thing. She delivered her jokes very much like...they were artillery. There was always a topper, a topper, and then a bang which was the payoff for the joke. And she punctuated every joke with her cigarette holder.

MD: Phyllis was messy and loud when she performed. But off-stage, Dwight says, she was a whole other person. She was meticulously organized. Her stage clothes were kept in a rack, with props labeled in a little plastic bag and attached to the costumes. Her filing cabinet was listed topics ranging from show business to undertakers to overpopulation. And....

DB: So there are probably three or four drawers devoted to her mythical husband Fang. And the jokes about Fang were primarily-how you would think how someone would deal with a husband -- he has drinking problems, he has working problems. And she deals rather acerbically with him throughout.

MD: It was the mirror image of male comedians who cracked wise about their wives. Phyllis had really turned that bit on its head.

DB: The context of comedy in the 50's was primarily reaction to the world around us in a very staged um, time honored way. And for Phyllis to come in and to criticize society but do it with comedy was a unique thing. I think if we laugh at

someone's reactions to the world first, then we think about it. I think laughter is a better way to make us accept certain theories and behaviors.

MD: So Phyllis was able to take a pretty radical stand -- that women didn't have to be doting wives and immaculate housekeepers. And she was embraced by America. She appeared in movies, had a couple TV shows, and did a USO tour with Bob Hope to entertain the troops in Vietnam.

DB: I think perhaps Phyllis' greatest contribution comedy was the role that she had for women, in comedy. Women didn't have a serious role, didn't have a defined role before Phyllis started. And I think she made it possible for other comediennes such as Roseanne Barr and Margaret Cho to come along and pursue the career of being funny on stage, doing comedy on stage.

MD: Why do you think that is?

DB: I think that's because of her way of delivering. I think it's because she was always playing a joke on herself. She was the butt of her humor and so therefore, she was part and parcel of you laughing. You didn't laugh at her, you laughed with her.

MD: And over a half century later, we're still laughing... at her jokes and those of a whole world of female comedians for whom she led the way.