<u>WHAT'RE THE ODDS!?!</u>
A documentary proposal by M. George Stevenson

Log line:

Joan Ginther has won the lottery four times, gaining almost $20M – really lucky lady or a PhD in mathematics who knows the odds all too well?

Synopsis:

The odds say that that a lottery winner like Joan Ginther, who won the Texas Lottery four times and gained more than $20M as a result, should come along once every 18 septillion years. The odds also say that what's much likelier is that Ginther had a plan. After all, she's a Ph.D. in math who taught statistics at Stanford and lives in Las Vegas – if anybody knew how to predict where winning scratch off tickets were likely to be found, it would be she.

So – how could this be done? Without Ginther to tell us – she has wisely refused all invitations to discuss her remarkable luck – we will talk to experts in statistics, casino security, state lotteries, and some of the people whose cooperation Ginther would have needed to pull off whatever games she played on what turns out to be a surprisingly scammable system in which millions place their hopes and dreams.

Treatment:

But on the bottom of the front page of the Corpus Christi Caller local section, there was an article with happier news: Bishop native wins millions for 4th time. A sixty-three-year-old woman named Joan R. Ginther had won $10 million, the top prize in the Texas Lottery's Extreme Payout scratch-off game. Ginther's cumulative winnings now totaled $20.4 million.

Though her first winning ticket came in 1993, in a standard pick-six lottery drawing, the last three came more than a decade later, in two-year intervals. She won $2 million in the spring of 2006, $3 million in the spring of 2008, and $10 million in the early summer of 2010. These last three were all scratch-off tickets.

After the Associated Press picked it up, Ginther's story was syndicated by hundreds of newspapers worldwide, under headlines like lottery queen and luckiest woman on earth.

We open with a black screen and introduce the question: How could anyone be as lucky as Joan Ginther who has won the lottery four times - in 1993, 2006, 2008 and 2010 -- and won more than $20M, which we see via news reports. According to the Associated Press article, this made her a candidate to be the "luckiest woman on earth."

A four-time lottery winner did seem unlikely, but how unlikely was it really? The AP interviewed mathematicians. Their findings: the odds of such a thing occurring were one in eighteen septillion. This is what eighteen septillion looks like:

18,000,000,000,000,000,000,000,000

There are one septillion stars in the universe, and one septillion grains of sand on Earth. With one-in-eighteen-septillion odds, it can be expected that a person should have Ginther's good luck about once every quadrillion years. Since the sun will envelop our planet in just five billion years, it is unlikely that another earthling will repeat her success.

According to some statisticians, the odds of this happening are greater than the number of all the stars in the universe *TIMES 18* to 1, which is literally astronomical odds.

5/"She's obviously been born under a lucky star," said a Texas Lottery Commission spokesman, who added that they did not suspect any foul play. Ginther could not be reached for comment.
6/I found myself trying to visualize eighteen Earths' worth of sand, and eighteen universes of stars. There are limits even to miracles.
I called a statistics professor, who said that Ginther's odds of winning were significantly higher than one in eighteen septillion, but that what was even more likely,

from a statistical standpoint, was that some sort of fraud had been perpetrated.

What they also say is that, while she may have been born under "a lucky star," some kind of system-gaming is far more likely. A statistics professor, who said that Ginther's odds of winning were significantly higher than one in eighteen septillion, but that what was even more likely, from a statistical standpoint, was that some sort of fraud had been perpetrated.

7/A professor at the Institute for the Study of Gambling & Commercial Gaming at the University of Nevada, Reno, said, "When something this unlikely happens in a casino, you arrest 'em first and ask questions later."
"She must have some kind of scam working," a casino surveillance expert in Las Vegas told me. "They need to lock her up. She would be on my blacklist."

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"She must have some kind of scam working," a casino surveillance expert in Las Vegas told me. "They need to lock her up. She would be on my blacklist."

8/I asked the director of another state lottery whether he believed that the Texas Lottery suspected no foul play. "You can bet on two things," he told me. "One, they're doing a serious investigation. Two, they ain't going to let anyone find out about it."

When it was pointed out that the Texas State Lottery announcement said that there was no suspicion of foul play, the director of another state lottery said, "You can bet on two things," he told me. "One, they're doing a serious investigation. Two, they ain't going to let anyone find out about it."

So, clearly, the fix was in, but what fix?

9/Of all forms of lottery games, scratch-offs are the most vulnerable to fraud.
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The most common example is the so-called Retailer Scam. One made headlines just a few months ago when a customer tried to redeem a $10,000 scratch-off ticket at a Baltimore liquor store. The clerk, Melissa Stone, told the customer that the ticket was not a winner. The next day, Stone tried to collect the money herself at the Lottery headquarters, only to be arrested for grand theft. The customer, it turns out, had been an undercover cop.

Of all forms of lottery games, scratch-offs are the most vulnerable to fraud. The most common example is the so-called Retailer Scam. One made headlines just a few months ago when a customer tried to redeem a $10,000 scratch-off ticket at a Baltimore liquor store. The clerk, Melissa Stone, told the customer that the ticket was not a winner. The next day, Stone tried to collect the money herself at the Lottery headquarters, only to be arrested for grand theft. The customer, it turns out, had been an undercover cop.

10/[Similar centralization led to a major lottery scandal seven years ago in Indiana. A security guard for the Hoosier Lottery named William C. Foreman had access to the encrypted file and the shipping information. One night he sent two of his friends to buy every ticket in a store that he knew was holding a $1 million ticket. The chief of security recognized one of the winners as a friend of someone on his staff and they were arrested.]

In Indiana several years ago, a security guard for the Hoosier Lottery named William C. Foreman had access to the state lottery's encrypted file of winning tickets and the shipping information for where they would go. One night Foreman sent two of his friends to buy every ticket in a store that he knew was holding a $1 million ticket. The Indiana Lottery's chief of security recognized one of the winners as a friend of someone on his staff and they were arrested.

11/Of all forms of lottery games, scratch-off tickets leave the least to chance. Winning tickets are not, in fact, distributed randomly through the entire set. If they were, that would leave open the possibility that all the jackpots might appear in the very first batch of tickets shipped to

stores. **The winning tickets might be claimed within a week, rather than the months over which major scratch-off series usually play out. The Texas Lottery would be out some $30 million in prize money without having sold nearly enough tickets to cover the payouts.**

To avoid this scenario, the Texas Lottery divides its print run into six batches, or pools. For the high-stakes games, each pool of half a million tickets contains one sixth of the prize money. When a game goes on sale, the first pool is shipped off to stores. Successive pools aren't released until the preceding one is close to selling out. This system guarantees that the lottery never loses.

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12/There are theories that the lottery goes even further than this to ensure profitability. Dawn Nettles, a sixty-year-old woman who lives in suburban Dallas, has been

obsessively monitoring the Texas Lottery for her biweekly newsletter, the Lotto Report, since 1993. She has recorded the names and addresses of every winner of Lotto Texas, Cash Five, Pick 3, Daily 4, Texas Two Step, and the nearly 1,400 scratch-off games that have been issued by the Lottery. She keeps track of unclaimed tickets, prize amounts, ticket runs, redeem dates, and sales figures, and is in regular contact with high-level members of the Lottery Commission. Nettles files open-records requests with the commission on a weekly basis. Her work as a watchdog has led to reforms in the way the Lottery conducts its business, as well as to numerous lawsuits. Each issue of Lotto Report is ten pages long, with three dense columns of data.

Most high-stakes scratch-off games advertise a print run of three million tickets, three of which are grand-prize winners. Nettles is convinced that the Texas Lottery tries to hold one, if not two, of the three grand prizes for the later batches: "Every time there's a big, highdollar ticket out there, with a big, high-dollar prize, one jackpot comes in real fast. But the other two don't come in until the game's almost over." This makes sense from a business perspective. Nobody buys lottery tickets for the secondary prizes.

In each of Ginther's wins, the first jackpot came out early in the print run. And in each case, Ginther claimed the second jackpot more than halfway through the run.

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Dawn Nettles (female, 60s) has published a biweekly newsletter, the Lotto Report, a densely printed, 10-page newsletter, since 1993. She has recorded the names and addresses of every winner of Lotto Texas, Cash Five, Pick 3, Daily 4, Texas Two Step, and the nearly 1,400 scratch-off games that have been issued by the Lottery. She keeps track of unclaimed tickets, prize amounts, ticket runs, redeem dates, and sales figures, literally everything.

Nettles is convinced that the Texas Lottery tries to hold one, if not two, of the three grand prizes for the later batches: "Every time there's a big, high-dollar ticket out there, with a big, high-dollar prize, one jackpot comes in real fast. But the other two don't come in until the game's almost over."

According to Nettles' newsletter, each of Ginther's wins, the first jackpot came out early in the print run. And in each case, Ginther claimed the second jackpot more than halfway through the run.

[Etc. Etc. etc. until the end of the story]

A/V Script:

Video	Audio
BLACK SCREEN	MUSIC UP NARRATOR: Joan Ginther is a lucky woman:
FADE IN: GRFX: NEWSPAPER ARTICLE (1993): Woman wins $5M in Pick 6	MUSIC CONT. NARRATOR: She won the lottery. Not only that…
DISSOLVE TO: GRFX: NEWSPAPER ARTICLE (2006): Woman wins $2M in Texas Scratch-off	MUSIC CONT. NARRATOR:...she did it again…
DISSOLVE TO: GRFX: NEWSPAPER ARTICLE (2008): Woman wins $3M in Texas Scratch-off	MUSIC CONT. NARRATOR:… and again…
DISSOLVE TO: ARCHIVE FOOTAGE (2010): Four-time Lottery Queen wins $10M	MUSIC CONT. NARRATOR: :... and again.
FADE TO BLACK	MUSIC CONT.

FADE UP: [Numerals] 1 in 18 FADE UP one [0] every half second for 12 seconds until we see: 1 in 18,000,000,000,000,000,000,000,000	NARRATOR: What're the odds? Actually, the AP interviewed mathematicians who figured they were one in eighteen septillion. How big a number is that? There are… Wait for it, Wait for it, Twenty four zeroes. For reference, there are:
DISSOLVE TO: EXT. JONES BEACH SEEN FROM ABOVE – DAY	MUSIC CONT. NARRATOR: One septillion grains of sand…
FAST ZOOM OUT TO: IMAGE OF THE WHOLE EARTH FROM SPACE	MUSIC CONT. NARRATOR: …on earth. Or one septillion…
FAST ZOOM OUT TO: HUBBLE TELESCOPE IMAGE OF THE MILKY WAY	MUSIC CONT. NARRATOR:..stars in the…
FAST ZOOM OUT TO: HUBBLE TELESCOPE IMAGE OF DEEP SPACE WITH RANDOM WIDELY SPACED GALAXIES	MUSIC CONT. NARRATOR:…Universe. Other experts have a different idea of the odds:
CUT TO: INT. UNV/RENO OFFICE – DAY PROF. NAME sits at her desk. LOWER THIRD: Prof. Name Institute for the Study of Gambling and Commercial Gaming University of Nevada at Reno PROF. NAME: When something this unlikely happens in a casino, you arrest 'em first and ask questions later.	MUSIC OUT INT. UNV/RENO OFFICE – AMBIENCE PROF. NAME: When something this unlikely happens in a casino, you arrest 'em first and ask questions later.
CUT TO: INT. CAESAR'S SURVEILLANCE MODULE – DAY NAMEY NAME, wearing sunglasses, looks out the one-way glass onto the gaming table LOWER THIRD: Namey Name Casino Surveillance Expert NAMEY NAME: She must have had some kind of scam working. They need to lock her up.	INT. CAESAR'S SURVEILLANCE MODULE – AMBIENCE NAMEY NAME: She must have had some kind of scam working. They need to lock her up.

CUT TO: INT. STATE LOTTERY DIRECTOR'S OFFICE - DAY Well-appointed corporate office. LOTTERY DIRECTOR NAME NAMESON (male, 50s, corporate attire) sits at his desk. Nameson reacts, then: NAMESON: You can bet on two things: One, they're doing a serious investigation. Two, they ain't going to let anyone find out about it.	INT. STATE LOTTERY DIRECTOR'S OFFICE - AMBIENCE INTERVIEWER (O.S.): The Texas State Lottery announcement said that there was "no suspicion of foul play" in the Ginther case. NAMESON: You can bet on two things: One, they're doing a serious investigation. Two, they ain't going to let anyone find out about it.
FADE TO BLACK	NARRATOR: So the fix was in, but what fix? Scratch-off Lottery tickets are statistically most vulnerable to fraud...
FADE IN: INT. BODEGA – DAY (SURVEILLANCE CAM) A CLERK (Male, 30s, T-shirt and jeans) is at the register, which is next to a Lottery machine. A CUSTOMER (Male, 30s, dressed like one of the track-suited guys from *Donnie Brasco*) comes up to the register. CUSTOMER [ALL SPOKEN WORDS ARE SUBTITLED]: Dude, I think I won! Customer holds out a lottery ticket. Clerk takes it and looks at it closely, then punches up a number on the Lottery machine and looks at that closely. CLERK: Nah, sorry, man, it's close but not a winner. CUSTOMER: Seriously? [BLEEP]. I thought it was.	SEGUE TO: INT. BODEGA – AMBIENCE (STATIC-Y) NARRATOR: ...but the most common is the Retailer Scam. [SOUND OF SPOKEN WORDS ARE ECHO-Y AND STATIC-Y DUE TO SURVEILLANCE CAM MICROPHONE] CUSTOMER: Dude, I think I won! CLERK: Nah, sorry, man, it's close but not a winner. CUSTOMER: Seriously? [BLEEP]. I thought it was.

The Customer walks away and the Clerk pockets the ticket.	NARRATOR: Watch what the Clerk does here.
CUT TO: EXT. LOTTERY HQ – DAY (REENACTMENT) A MAN DRESSED LIKE THE CLERK walks into Lottery headquarters .	EXT. LOTTERY HQ – AMBIENCE NARRATOR: The next day the Clerk went to Lottery Headquarters to claim the prize. Unfortunately for the Clerk...
DISSOLVE TO: GRFX: MUG SHOT OF CLERK	NARRATOR: … the Customer was an undercover cop.
CUT TO: EXT. LOTTERY HQ – DAY (REENACTMENT) A MAN DRESSED LIKE THE CLERK is walked out of the building in handcuffs by two POLICE OFFICERS.	SFX: *Law & Order* KA-KUNG sting NARRATOR: And convicted for the theft.
DISSOLVE TO: GRFX: NEWSPAPER ARTICLE (2006): Woman wins $2M in Texas Scratch-off	MUSIC UP NARRATOR: Too simple ...
FAST DISSOLVE TO: GRFX: NEWSPAPER ARTICLE (2008): Woman wins $3M in Texas Scratch-off	MUSIC CONT. NARRATOR: ...to explain...
FAST DISSOLVE TO: GRFX: NEWSPAPER ARTICLE (2010): Woman wins $10M in Texas Scratch-off	MUSIC CONT. NARRATOR: ...Ginther's repeat jackpots
DISSOLVE TO: STOCK FOOTAGE - SCRATCH OFF TICKETS PRINTING PRESS Scratch off style tickets being spit out of a printing press as WORKERS observe and organize the sheets for binding.	MUSIC CONT. NARRATOR: Like most state lotteries, the Texas Lottery divides its print run into batches, or pools.
CUT TO: ANIMATION - TEXAS STATE MAP - STAR INDICATES AUSTIN ARROWS SPRING FROM AUSTIN INTO LINES THAT LEAD TO THE BIG CITIES,	MUSIC CONT. NARRATOR: Each pool of half a million tickets contains one sixth of the prize money. When a game goes on sale, the first pool

THEN BRANCH INTO SMALLER AND SMALLER TOWNS TILL THE MAP LOOKS LIKE A DIAGRAM OF THE HUMAN CIRCULATORY SYSTEM.	is shipped off to stores. Successive pools aren't released until the preceding one is close to selling out. This system guarantees that the lottery never loses.
CUT TO: INT. DALLAS HOME - GARAGE - DAY In a garage with an office size printer/copier and lots of document boxes. DAWN NETTLES (60s, business casual dress) looks into the hopper where the stapled copies are being spit out.	MUSIC CONT. INT. DALLAS HOME - GARAGE - AMBIENCE NARRATOR: Dawn Nettles, who lives in Dallas, has published her Lotto Report twice a week since 1993. It keeps track of every winner of Lotto Texas, Cash Five, Pick 3, Daily 4, Texas Two Step and the nearly 1,400 scratch-off games that have been issued by the Lottery.
CUT TO: INT. DALLAS HOME - GARAGE - DAY DAWN NETTLES: Every time there's a big, high-dollar ticket out there, with a big, high-dollar prize, one jackpot comes in real fast. But the other two don't come in until the game's almost over.	MUSIC CONT. INT. DALLAS HOME - GARAGE - AMBIENCE DAWN NETTLES: Every time there's a big, high-dollar ticket out there, with a big, high-dollar prize, one jackpot comes in real fast. But the other two don't come in until the game's almost over.
DISSOLVE TO: STOCK FOOTAGE - SCRATCH OFF TICKETS PRINTING PRESS Scratch off style tickets being spit out of a printing press as WORKERS observe and organize the sheets for binding.	MUSIC CONT. INT. DALLAS HOME - GARAGE - AMBIENCE NARRATOR: Like most state lotteries, the Texas Lottery divides its print run into batches, or pools.
CUT TO: INT. DALLAS HOME - GARAGE - DAY Nettles holds up a copy of the LOTTO REPORT from 2006 and points to the date of the issue, then opens to a page labeled "FIRST JACKPOT" Nettles then picks up another 2006 LOTTO REPORT, open to a page labeled "JOAN'S JACKPOT" and points to the later date.	MUSIC CONT. INT. DALLAS HOME - GARAGE - AMBIENCE CONT. NARRATOR: In Ginther's 2006 win, the first jackpot came out early in the print run. And Ginther claimed the second jackpot more than halfway through the run.

Nettles then holds up two fanned issues of the LOTTO REPORT from 2008. Nettles hold two fanned issues of the LOTTO REPORT from 2010 and shakes her head	This happened again in 2008… ...and 2010. Coincidence? Odds are, no way.

ETC.   --- A/V HERE