



DOCUMENTARY FILMS

PRESENTS

A LITTLE DOT STUDIOS

CONSEQUENTIAL & HISTORY HIT PRODUCTION  
IN ASSOCIATION WITH LITTLE MONSTER FILMS

DIRECTED AND PRODUCED BY  
ELIZABETH CHAI VASARHELYI  
JIMMY CHIN  
NATALIE HEWIT

PRODUCED BY RUTH JOHNSTON

PRODUCED AND EDITED BY BOB EISENHARDT



**Year of Production:** 2022/2023/2024

**Year of Release:** 2024

**Country of Production:** UK, United States, Antarctica, Iceland, Denmark, South Africa,

**Language:** English

**Genre:** Documentary Film  
**Runtime:** 103 minutes  
**Rating:** TV-14

**PHOTOS**

[Click Here](#)

**US TRAILER**

[Click Here](#)

**UK TRAILER**

[Click Here](#)

**KEY ART POSTER - US & UK**

[Click Here](#)

**SOCIAL**

@natgeodocs

**PRESS CONTACTS**

**National Geographic Documentary Films**

Nadia Ahmadein | [Nadia.Ahmadein@natgeo.com](mailto:Nadia.Ahmadein@natgeo.com)

Marcus Cammack | [marcus.cammack@natgeo.com](mailto:marcus.cammack@natgeo.com)

**US Press**

Brooke Blumberg | [blumberg@ssmandl.com](mailto:blumberg@ssmandl.com)

Dixon Knox | [Knox@ssmandl.com](mailto:Knox@ssmandl.com)

Shannon Hale | [hale@ssmandl.com](mailto:hale@ssmandl.com)

**UK Press**

Johanna Whitehead | [johanna@allgoodthingsltd.co.uk](mailto:johanna@allgoodthingsltd.co.uk)

Molly Whitehall | [molly@allgoodthingsltd.co.uk](mailto:molly@allgoodthingsltd.co.uk)

**Logline:**

From National Geographic Documentary Films and directed by Chai Vasarhelyi, Jimmy Chin and Natalie Hewit, **ENDURANCE** tells the inspiring stories of two landmark expeditions, bound by their shared grit and determination.

**Synopsis:**

In a legendary feat of leadership and perseverance, polar explorer Sir Ernest Shackleton kept his crew of 27 men alive for over a year despite the loss of their ship in frigid pack ice. Over a century later, a team of modern-day explorers sets out to find the sunken ship. From National Geographic Documentary Films and directed by Chai Vasarhelyi, Jimmy Chin and Natalie Hewit, **ENDURANCE** tells the inspiring stories of these two landmark expeditions, bound by their shared grit and determination.

**PREFACE**

In 1914 — the heroic age of exploration, when explorers were discovering new parts of the natural world and the public was following a new breed of celebrity adventurers — Anglo-Irish Merchant Navy officer and veteran explorer Sir Ernest

Shackleton commanded an expedition to sail to Antarctica. His mission was to be the first to traverse the vast continent from one coast to another: a distance of 1,800 miles across the most difficult terrain on the planet. Selecting an eclectic crew of experienced polar hands and young, enthusiastic novices, Shackleton broke with convention to go to the southern end of the planet just as World War I began. Endurance, however, would never reach her destination, getting trapped in the pack ice and ultimately sinking, leaving Shackleton and his men alone on the ice of the Weddell Sea, eating penguins, seals, their sled dogs and as time went on, a starvation diet of limpets and even boiled seaweed when the crew eventually reached Elephant Island. Shackleton soon realized his men would not survive much longer and decided to sail a lifeboat with five other crew to the island of South Georgia, a perilous voyage of over 800 miles across the stormy Southern Ocean, to seek help. Shackleton returned to Elephant Island 308 days after abandoning the Endurance and saved all the marooned men. Unbelievably and against all the odds, Shackleton and all 27 of his crew survived the ordeal. Famous as one of history's greatest "successful failures," the tale of the Endurance is an example of inspirational leadership in the face of adversity. It is the greatest survival story of all time.

In early 2022, the Endurance22 expedition team, onboard the South African icebreaker S.A. Agulhas II, carrying cutting-edge undersea search technology, set out to find the Endurance at the bottom of the Weddell Sea.

Organized and funded by the Falklands Maritime Heritage Trust, expedition Leader Dr. John Shears, expedition subsea manager Nico Vincent, director of exploration Mensun Bound and historian and broadcaster Dan Snow led a team of experts from around the globe in search of this perfect time capsule.

**ENDURANCE** tells both stories, as the voices of Shackleton and his crew "read" from their expedition diaries, letters and other writings alongside Frank Hurley's original filmed expedition footage and photos, in another extraordinarily immersive film from Chai Vasarhelyi and Jimmy Chin, the Oscar®, BAFTA and Emmy® Award-winning filmmakers of "Free Solo," "Meru," "The Rescue" and "Nyad" along with BAFTA-nominated director Natalie Hewit.

## 'ENDURANCE': AN INTRODUCTION

The human experience is about pushing boundaries. By the late 1800s and through the first two decades of the 20<sup>th</sup> century, science and exploration were driving forces for expeditions to the polar regions. It may have been the calling of a rarefied few, yet it yielded progress for all humanity, as extraordinary leaders knew that ultimate success is built upon countless failures.

Sir Ernest Shackleton was that kind of a leader, and in August 1914 — after his expedition with Capt. Robert Falcon Scott (on the Discovery, 1901-1904), his leadership of the Royal Scottish Geographical Society and his first groundbreaking trip to the South Pole leading the crew of Nimrod (1907-1909) — Shackleton set out again for Antarctica. Shackleton, famous for his discovery of the South Polar Plateau and other accomplishments, was determined to lead the first land crossing of the Antarctic continent.

It was the last major voyage in the heroic age of Antarctic exploration and became history's greatest survival story.

After the Endurance became trapped in pack ice in the Weddell Sea off the coast of Antarctica in January 1915, Shackleton and his crew abandoned ship and took to an ice floe, surviving for months on sledge rations, seal meat, penguins and, soon, their beloved sled dogs. They eventually made their way to a tiny, remote and uninhabited outcropping of rocks and ice called Elephant Island on the Antarctic Peninsula. Knowing they'd all eventually die of starvation, 20 months after their initial departure from England, Shackleton and five men then set sail from Elephant Island in a small lifeboat for a whaling station 800 miles away on the island of South Georgia. Finally making landfall on South Georgia after a miraculous navigation across the treacherous Southern Ocean, Shackleton and two of the men crossed the island's unmapped mountains and glaciers to get help. Once they reached safety, after three failed rescue attempts, Shackleton successfully returned to Elephant Island to save the remaining crew, who, by then, were losing hope

of ever being rescued. Over 750 days after leaving England, Shackleton and all 27 members of the crew were finally out of danger.

In early 2022, the *Endurance22* expedition set out on the South African icebreaker S.A. Agulhas II. The team was led by expedition leader Dr. John Shears, expedition subsea manager Nico Vincent, director of exploration Mensun Bound and historian and broadcaster Dan Snow, along with a team of scientists and technologists from around the world, and together as a team they began the search for the wreck of *Endurance*, resting somewhere at the bottom of the Weddell Sea for 107 years.

**ENDURANCE** — the latest edge-of-your-seat documentary from directors Elizabeth Chai Vasarhelyi and Jimmy Chin (“*Meru*,” “*Free Solo*,” “*The Rescue*”) and Natalie Hewit (“*Antarctica: Ice Station Rescue*,” “*Forensics: The Real CSI*,” “*Surviving Covid*,” “*The Drug Trial: Emergency at the Hospital*”) — documents the two expeditions in a dynamic adventure that speaks to the dreams, challenges, excitement and philosophies of two eras; a reverence for the natural world; and the eternal importance of leadership and ingenuity. Using unprecedented AI tools, the actual voices of Shackleton and his crew “read” their personal diaries from the 1914 expedition and, illustrated with Frank Hurley’s original expedition footage and photos, create a shiver-inducing venture into the past using immersive techniques. Audiences are placed into you-are-there scenarios as Shackleton and six crew members speak their own diary entries, something never recorded when they were alive. (Shackleton died Jan. 5, 1922.)

“The story of **ENDURANCE** has an audacity and a strength of will that is inherently human and a view of leadership that felt so daring,” says Vasarhelyi. “The details of the survival and the audaciousness of it all surprised me, especially in how fresh it felt and how much humility it triggers in us as humans.”

“It’s the greatest survival tale ever told, but the world may have forgotten the details,” says Chin. “I thought I knew the story, yet when we dove into it and had so much incredible access from the Scott Polar Research Institute and Royal Geographical Society, all the new details helped us re-experience the journey that Shackleton and his team went through. It was very ` and eye-opening. I’ve been a professional climber for over 20 years and have done a lot of expeditions, but to see what they were able to achieve through Shackleton’s leadership was extraordinary.”

Says Hewit, “For those of us who are from Britain, Shackleton has loomed large in our national imagination for generations, almost as a kind of mythology that swirls around the world of exploration. His biggest failure led to his greatest success, and that is something that I think can bring all of us hope. I have always loved redemption stories and Shackleton’s is one of the greatest of them all.”

Notes producer Ruth Johnston, “Our production team took inspiration from Shackleton and his men. We relied on partners from around the globe who brought specific technical expertise to help tell this story, and we trusted each other and kept focused on making the definitive film about what happened from 1914 to 1915 and in 2022. There’s a reason they teach Shackleton’s leadership lessons in some of the best business schools in the world.

“Producing this film was as rewarding as it was challenging,” continues Johnston. “On one hand, it’s an epic project that we hope will amaze and entertain audiences. Our objective from the start was to make the definitive film about Shackleton’s expedition and the modern *Endurance 22* team who, over 100 years later, went to the end of the earth to find his ship. But there were so many intricate, fascinating elements of the story that we had to leave on the cutting room floor. The wealth of archive, expertise, and footage was truly a blessing, but made the edit incredibly difficult.”

Says **ENDURANCE** editor and producer Bob Eisenhardt, who also worked with Vasarhelyi and Chin on “*Meru*,” “*Free Solo*” and “*The Rescue*,” “I knew the Shackleton story somewhat, but the more I learned, the more I was surprised. Any one thing they went through would be enough to be a survival story in and of itself; the fact that it was one thing after the other that just kept coming was amazing. I’d never seen all of [Frank Hurley’s original expedition film] footage and all the

still photos that James Francis ‘Frank’ Hurley, official photographer of Shackleton’s crew on *Endurance*, had taken. At the Royal Geographical Society, they have Hurley’s original glass plates there and platinum prints, and they’re just stunning.

“With the 2022 expedition, it was interesting to see how the crew managed to locate the original *Endurance*,” adds Eisenhardt. “It was said that *Agulhas II* was only the third ship to reach the spot where they thought Shackleton’s ship sank. It proves that, while it seems like we know everything about this planet, there are still unexplored territories.”

“When I first read the full tale of the survival of the original *Endurance* crew, I was astounded,” says executive producer Paul Woolf. “I’ve read, heard and watched scores of different tellings of the story since then, and I’m still amazed every time. Even now, there are moments when I find myself thinking, ‘Surely they don’t survive this?!’ And just when you think the crew has experienced the most dangerous possible thing that nature and the Antarctic could throw at them, something even *worse* occurs. I think it’s like a great action movie in that respect.”

“All of our films are all related genetically, and that’s why we wanted to take this on,” says Vasarhelyi, of the ways **ENDURANCE** is of a piece with her and Chin’s acclaimed films. “This is really the Holy Grail of survival stories.”

Says Eisenhardt, “Jimmy and Chai always try to get to the people underneath an event and show the human beings at the heart of their stories, so you get an appreciation for what’s happening on the human level. Now, that’s particularly hard if it’s people who have been dead for some 100 years. How do you bring that out? We always had that focus on **ENDURANCE**, and that’s why this film really connects with people.”

Cutting-edge AI technology allowed the filmmakers to do something never before done in the annals of adventure filmmaking. They used archive recordings of the voices of Shackleton and six of his crew members, and Respeecher — a Ukraine-based speech synthesis software company — then adapted the recordings so that the men could “read” their diary entries from the 1914 voyage and rescue. The result is an incredible achievement in storytelling. The dramatic diary readings accompany archive images courtesy of the Royal Geographical Society and Hurley’s filmed expedition footage courtesy of the British Film Institute, as well as Daniel Pemberton’s moving and epic original score.

“The Shackleton journey was a great story with very little footage,” says Vasarhelyi. “So we decided to accept the constraint that we’d only use the voices that we could actually find recordings of, then use the diaries of those people.”

The film team’s decision to only use the diaries of the men whose voice recordings they had ended up providing a more rounded cast of characters rather than selecting them by other means, for example, by their seniority on the expedition. This constraint led to something groundbreaking.

“Being able to bring those diary readings to life using AI means you’re listening to Shackleton and his team narrating their own diaries, and it *is* their voices,” says Chin. “That was something that couldn’t have been done even a few years ago, which really brings a new aspect of the film to life.”

“AI voice recreation from recordings this old hadn’t been tried before,” notes Johnston. “Respeecher’s innovative tech allowed us to give real, authentic voice to characters who had been silent for decades. That they did this from Ukraine in the middle of ongoing violence makes their work that much more impressive.”

So many partnerships strengthened the film’s journey through history. “I called Burberry soon after production began as they’re integral to this story,” says Johnston. “Shackleton’s men were wearing Thomas Burberry’s material, gabardine, and they wouldn’t have survived without it. Burberry agreed to make outfits from the original pattern and material for our recreations. In below-freezing temperatures in Iceland, the mountain guides who played the expedition crew were amazed at how well Burberry worked. It also was useful for us to have the original material at hand when it came to color-treating the Burberry outfits, which are frequent in Hurley’s footage!”

Making the film, Chin was reminded of moments in his own career as a professional climber and athlete.

“The Endurance story certainly reminds me that on these sorts of expeditions, you can prepare for anything and everything, but at the end of the day, nature decides whether you make it or not,” says Chin. “Often, you’re faced with all kinds of seemingly impossible situations and maybe there’s one very narrow margin of error, and if you’ve done all your due diligence, you can thread it. And that’s what they were able to do, thread the thinnest of margins to be able to survive.

“So much of that was due to their mental outlook, which is a credit to how Shackleton took this team and led them through the crisis,” Chin continues. “I love the story of how he picked his team — a lot of them hadn’t been to Antarctica before or had little experience. But he didn’t pick them based purely on experience; he picked them based on character. That’s what we hope comes through in the film, that he chose people of character.”

Chin’s own experiences in Antarctica in 2017 and 2020 added to his understanding of the story.

“I’ve been to Antarctica twice,” notes Chin. “First to climb in a place called Queen Maud Land, an incredible area where these giant ice walls basically stick straight out of the glaciers, and which has a 4,000-foot wall called Ulvetanna that my partner Conrad Anker did a first ascent on. That was one of the most special climbs I’ve ever done. Then, we went back to ski the Vinson Massif mountain. Just to survive in Antarctica, you’re living on the edge because it’s a -20 or -30 degree ambient temperature, so you feel like you’re on borrowed time, like you’re not supposed to exist in a place like that.”

The mix of Shackleton’s journey and the modern discovery of his ship was another filmmaking challenge.

“When Chai and Jimmy came on board, we talked a lot about the commonalities between their previous films, the original Endurance expedition, and the 2022 quest to find the wreck,” says Woolf. “Among these are the persistence, resilience, ability to improvise and human ingenuity needed to survive and succeed in the most difficult and dangerous conditions. Also, the importance of leadership, teamwork, and camaraderie. Those are pretty timeless themes.

“The Falklands Maritime Heritage Trust, which funded and organized the 2022 expedition, very much wanted to emphasize those kinds of qualities in the educational outreach work it did around the expedition along with its partners, Reach the World and the Royal Geographical Society,” continues Woolf. “They really believed that young people would be inspired by hearing both stories and could apply those sensibilities — of resilience and ingenuity — to their own lives. By telling the two stories of 1914 and 2022 alongside each other, we felt we’d be making that point: that these are enduring qualities. It’s implicit that the qualities needed by the men to survive in 1914-1916 are ones we still need today; probably, given the state of the world, ones we’re all going to need as we deal with environmental change and the instabilities it brings.”

“There were so many incredible parallels between the modern-day story of a team trying to achieve the impossible and the story of the original Endurance crew who really did achieve the incredible,” says Hewit. “I hope that audiences can take inspiration from both of these narratives as they are woven together across time. Inspiration that no matter what we are facing in life, finding a way to persevere in the face of adversity is a powerful act.”

“As filmmakers, balancing the two different parallel expeditions and keeping audiences present in both of these experiences was certainly a big challenge,” says Chin. “Because those are two very distinct stories in the film, even though they’re related. We wanted to create a visual language to build that out and marry the two in a way.”

## JOURNEYS TO THE BOTTOM OF THE WORLD

It isn’t just eras that **ENDURANCE** crosses. It’s also the way people see the world around them, from nature to technology

to heroism. Vasarhelyi and Chin's work consistently examines how human beings, from Alex Honnold to Richard Stanton and John Volanthen to Diana Nyad, view extreme challenges as part of being alive.

"All of our films are about telling a story that brings to life everyone's innate, shared humanism," says Vasarhelyi. "While making this film, I was thinking about the stakes that were involved, the idea of wanting to make a name for yourself, the idea of Shackleton as an outsider, what makes you continue when all seems lost like it did for that crew?"

"For Shackleton, what got him through was his sense of duty to his men," adds Vasarhelyi. "Yet, what does that mean? I think one great irony of the story is how they returned from being saved and then emerged into World War I, and many of the men *immediately* enlisted, signing up to go to war because *that's* what they were supposed to do. With **ENDURANCE**, yes, it was about translating the survival experience, but it was also about taking a moment to really be *with* it and trying to understand what it takes to have a vision and a dream of crossing Antarctica. And then, once you realize that everything's gone wrong, what does it actually feel like when you know you're alone on the ice? What kept them going? There is an amazing civility that Shackleton's crew kept amongst themselves. They were writing in their journals, listening to music. That's so human and makes you think about what gives our lives meaning, even in extreme circumstances."

"There's a great camaraderie evident in the diaries," says Johnston. "They bounce off each other and often tease each other. That element of fun is amazing to observe in these extreme situations. Stuck in darkness for months on end, they played music, performed theater and found other ways to entertain themselves."

Says Eisenhardt, "Making history immediate is always a challenge in filmmaking, and there was a lot of discussion about how to do that. How do you make things 110 years old feel like you could meet these people today and understand them? *Endurance22* was similar, as they're pushing the envelope in different ways. But Shackleton also brought with him the latest technology of the age, including a motion-picture camera in 1914, and so they had their own cutting-edge stuff. And, a big thing for this film was the idea of failing. That there's no success without failure, and the expedition in 2022 channels that over and over again: The fact that you pick yourself up and keep going is the moral of the story."

Says Chin, "In expeditions where people have their roles and are accountable for things, they take pride in the work that they do but are also willing to pick up wherever anybody else may leave off — I guess you'd call it expedition behavior. And Shackleton's crew was always willing to carry other people's weight if they needed it. There's a moment in the film when someone tips over a glass of milk, and without anybody saying anything, the other men on the crew quietly pour a portion of their milk into his cup. That was the moment that the guy who spilled his drink finally lost it and fell apart, and his crewmates, without saying anything, brought him back to calm."

"Each of the stories, in 1914 and 2022, mirror the other in wonderful ways, showing the continuity of [polar] exploration," says Eisenhardt of **ENDURANCE**. "Yet there are two separate stories with two timelines, and it was our job to have audiences understand the difficulties for each."

Says Vasarhelyi, "There's something inherent in the Shackleton story that I'm always humbled by, the sheer survival aspect. It never gets old! It's one of those things that, just when you think you really know it, you hear *another* detail about it that's just stunning and reminds us of how audacious that expedition truly was."

"Very often, explorations end very badly — think of Robert Falcon Scott — and so the fact that Shackleton was able to bring his men through it all is quite amazing. His men said he was 'The best leader God ever created,' so we try to evoke what that meant," says Eisenhardt. "The idea that you get to success through failure is essential. There are still parts of this planet that haven't been seen or haven't been recorded. But also, on a personal level, there's always the act of doing things you haven't done before, pushing the envelope either for yourself or society or science."

“These men were facing certain death. There was nothing telling them they would survive,” says Johnston. “Their mission was to traverse Antarctica, but that mission quickly evolved from exploration to survival. Shackleton refused to let them fail.”

To recreate the visual aspect of the documentary, the **ENDURANCE** filmmaking team used Hurley’s photographs and film expedition footage along with selected footage from films of the 1920s and 1930s that showed polar expeditions. These included “South,” Hurley’s 1919 feature documentary, edited together from his original filmed record of the Endurance expedition. Then they filmed original recreations in California and Iceland, on glaciers and recreated boats in actual ice and freezing temperatures.

“In documentaries, of course, there are different sources of material, archival and interviews and a variety of other things, but never to this extent,” explains Eisenhardt. “The Hurley footage was crucial, and we knew we had to use it right.” The process of color-treating the original expedition film required careful consultation and negotiation with the archivists of the British Film Institute, who preserve the film and generally don’t allow any manipulation of this unique film record.

Eisenhardt continues, “We added a bit of color to it, and it jumped off the screen. While editing, I had been looking at the same footage of Shackleton’s crew for eight months, and suddenly, I said, ‘Oh, they’re eating peas on the ice!’ It was extraordinary. I saw it finally. We felt very strongly that this was the way to go.

“The other element that was involved was recreations,” says Eisenhardt. “The Hurley footage is amazing, but when they abandoned the ship to go to the ice, they also abandoned the cameras. After that point, Hurley had a little pocket camera, and he shot maybe two dozen shots, so the story in the second half of the story was a challenge. So it’s a combination of the Hurley stills we had and archival from other films and interstitial moments we filmed in Iceland, blended together.”

“The January temperatures in Iceland for our recreation shoots were almost unbearable, but also made it incredibly realistic,” says Johnston. “We blasted water at our poor actors, but it made for great material with amazing colors. What we captured fit perfectly into our film and also provided a great guide for color-treating Hurley’s original footage.”

“And then, of course, we’re also telling this other story with its own timeline, the 2022 journey, and to understand the individual stories, you have to understand their goals and the characters involved,” adds Eisenhardt. “In a way, I was cutting two movies together, and they blended perfectly. Naturally, the 2022 expedition team was very familiar with the Shackleton story and could add layers of understanding about their quest, so that helped us tell the Shackleton story. In the modern footage, there’s high-tech, intense action, and we treated that in a more contemporary way. But with the Shackleton story, we wanted to make it feel like you’re *in* Antarctica. So, even with the music, we wanted to feel like we’re on the ice. And the pacing is different; things don’t move quickly down there.”

“The film being bookended by the Endurance22 mission underscores how Shackleton’s journey really wasn’t that long ago,” says Chin. “A blink of an eye, basically. And just speaking from experience, Antarctica still draws these types of explorers because it creates a feeling that few other places on Earth have. There’s an edge you get there from knowing any mistake can be fatal. That’s why when we heard that the 2022 expedition found the Endurance, we jumped on the idea of using that story to get into the Shackleton story and bring it to a whole new generation.

“We loved the parallel of the 2022 team with the Shackleton crew,” adds Chin. “John Shears, the expedition leader, has done, I think, 25 expeditions to Antarctica, and Nico Vincent, the expedition subsea manager, and Mensun Bound, the director of exploration, and all of them are the greatest shipwreck explorers and divers in the world. They’ve made the most significant discoveries of shipwrecks of our time, and they all had their specialty, and all quoted Shackleton throughout their mission. When we see them have a false lead after they thought they found the Endurance and they didn’t, and they’re obviously against a ticking clock, they know they have to keep their wits about them to make the final discovery.”



To meet film production and scientific requirements, it was necessary not only to get high-resolution 4K images but also digital scans of the wreck. Deploying a remote digital 4K camera with its lighting at a depth of 9,800 feet underwater is a huge technological challenge, given the data flow constraints. But for the first time at this depth, new photogrammetric and laser technology was deployed, enabling millimeter-scale digital reconstruction of the entire wreck. AI was used to improve data quality and brought forth an image of the entire Endurance wreck for the first time. The result is astonishing. New-age subsea technology was pioneered during the search for Endurance, which has since been reused notably on the Titanic.

\* \* \*

The Endurance22 team aboard the Agulhas II, assembled by the Falklands Maritime Heritage Trust under the Chairmanship of Donald Lamont, are the modern-day explorers whose discovery of Shackleton's ship is the counterpoint to the original story of the Endurance expedition.

Says Vasarhelyi, "The '22 expedition was hard because the stakes were so different, but it does get told through John Shears and that team, and they're the real deal — the greatest subsea scientists in the world. John worked at the British Antarctic Survey for some 25 years and ended his time at the Survey directing all of their Antarctic research stations and ships. His story is so compelling. He's soft-spoken and internal, and we needed, as an audience, to see that he's following his path because his grandma didn't have the means to travel, which triggered his imagination and inspired him to explore and then come back and tell stories to her. It's those essential human relationships that can inspire people to think so audaciously."

"Everyone on the crew of the Agulhas II was faced with the prospect of needing to overcome the constant challenges and setbacks that come with trying to achieve something that's never been done before — whether that was navigating to the Endurance sinking location, trying to find a shipwreck beneath the Antarctic sea ice, or attempting to broadcast live from the White Continent," says Hewit. "Having to find creative solutions with limited time and resources became an everyday occurrence. As was the continuous need to learn quickly about our environment, about the cutting-edge technology that we were using, and about each other."

The 2022 adventure had its share of thrilling moments even before it dramatically finds Shackleton's ship. "Shears' crew had to deal with hurdles constantly. It was just issue after issue after issue they had to problem-solve," says Johnston. "Each piece of that subsea team's expedition required perseverance."

"There's something about the tangibility of the ship itself in the modern section of the documentary," said Vasarhelyi. When you see those images of the men on the Endurance in 1914, and suddenly there it is under the sea beneath the Agulhas II, perfectly preserved, it makes Shackleton's achievement all that more palpable. I also really like the moments when the two expeditions sort of 'talk' to each other despite being separated by over 100 years. Like when Shears' crew realizes they have real meteorological observations from 1914 and how that information helps their modern-day expedition, that's so cool; the exploration that connects two different stories."

Says Johnston, "Individual roles were critical during the 2022 expedition, just like in 1914, and strong leadership was critical to keeping it all together. John, Nico and Mensun prepared for years and came to the expedition with a plan for what was needed, what wasn't and what to do when things went wrong. As Nico says, 'I don't like to have a plan A, B or C, because then there are only 26 plans. I have to be ready for a million things, not just 26!' Watching all the footage shot on the Agulhas, it was clear that he and his subsea team had to constantly problem solve. They did that in true collaboration and in a very difficult environment."

"Mensun, John and Nico not only all have professional reputations resting on the outcome, but all also have very personal reasons for wanting to succeed, which means you're rooting for them," says Woolf. "In our interviews with that team, we

really drilled down into those reasons. It's such a strong characteristic of all Chai and Jimmy's films, revealing people's motivations and their strengths and vulnerabilities and giving the audience relatable connections to them."

Says Hewit, "When they found the Endurance on the operations deck, the mood transformed from quiet astonishment to jubilation. The team were cheering, crying... Then Nico emerged from the control hut and, as we filmed, told John that the Endurance wasn't there. I was simultaneously both stunned and trying to process what this meant for the expedition. Nico was already making a new plan in his head to overcome the 'problem,' and I needed to capture that. It started to feel like a detective novel as people began to come up with theories to try to make sense of what they had found — or rather not found — and try to work out where Endurance might be hiding.

"Everything relied on the weather. As soon as the next cold snap began, we'd have to depart," continues Hewit. "With just a couple of days left, I was watching and waiting on the back deck when Nico told us, 'We've found Endurance!' Looking at the snap of the sonar scan Nico had on his phone, even to my untrained eye, it was clear this time it was it."

Says Woolf, "It's worth noting something one of the men on the Shackleton expedition, Thomas Orde-Lees, wrote in his diary in 1915: 'No doubt the explorers of 2015, if there is anything left to explore, will not only carry their pocket wireless telephones fitted with wireless telescopes but will also receive their nourishment and warmth by wireless.'"

## USING AI TO DIVE INTO HISTORY

The captivating experience **ENDURANCE** provides as a documentary is the result of filmmakers, tech teams and innovation coming together to truly hear what Shackleton's crew felt and thought in their own words and voices, recorded at presentations and during speeches or discussions but not "reading" their diaries ... until now.

"Audiences of this film are actually hearing the voices of Shackleton and the six others from his crew," says Chin. "While the most incredible thing to me as a filmmaker and photographer was the footage Hurley not only took but was able to preserve across an insane journey where survival was deeply in question. He dove back into the boat while it's sinking to save a bunch of the photographic plates, and then he gets them to Elephant Island and back to civilization. We mix the two elements together — the sound and the images — to bring people *into* that experience."

Says Vasarhelyi, "The authenticity of the experience really works. The poignancy of using the crew's real words and voices from 100 years ago is mind-bending! Along with the color-treated BFI footage — Hurley's original footage — it creates a texture that lends itself to understanding their experience. This is a great use of a new tool to explore nonfiction."

Breaking down the process used in the documentary, Eisenhardt explains, "We knew early on we were going to use the diaries of Shackleton and six others, but the directors didn't want to just bring in actors and have them make believe they're Shackleton. Ruth Johnston and I had been discussing Chat GPT, which had just come out, and Ruth has a background in using emerging tech in storytelling. So we searched a bit, and it turned out that we *did* have access to voices that were recorded at different times before those seven men had died, so we began to explore how it could be done. We needed to sample the original voices and get the data, then build the model from that and apply it to a present-day voice reading the text. We were feeling our way along because we'd never done this before.

"The Respeecher team of engineers in Ukraine had been recommended to us as being experts at this," Eisenhardt notes, and Respeecher's expertise was needed. He continues, "With Ernest Shackleton, for example, there was one recording of his voice on a wax cylinder, but you could *barely* hear it. The noise on the recording was as loud as his voice, and he was speaking strangely since he was projecting into a giant megaphone. We sent it to Respeecher, and they did tests while we recorded people's voices reading the diaries. We found one guy who sounded a bit like Shackleton, another like Hurley's Australian accent, etc. We sent those to Respeecher, and they sent back models of the seven voices we had recordings of. And suddenly, it seemed like it could work! There was a back-and-forth process. Then, for the final pass, we recast every

voice and made recordings again to get the pace, accentuation, tone, mood and, most importantly, emotion. Respecher took the actual voices that had previously been unusable and sent us back something amazing.”

The diaries were a treasure trove of personal reflection and facts about the expedition, and the filmmakers took great care to represent each man as accurately as possible. Says Woolf, “Some of the diaries have never been published, and as Mensun Bound says, the story is really told in those diaries. Some are very keenly observed, some are intentionally funny. We wanted to capture as many of those voices as we could in order to give as rounded as possible an account of the expedition. We could have had actors reading the words, but we knew AI [could] really capture those men’s voices and make their experiences very immediate. The men were from a range of backgrounds, and by hearing from seven of them, we make the point that all those qualities — resilience, ingenuity, teamwork — might have emanated from Shackleton, but they had to be enacted by *all* the men for the expedition to survive.”

“Like many of our films, people can watch this with their kids and parents because it comes down to an innate humanity and the idea of what are the reasons we do what we do?” continues Vasarhelyi. “Shackleton was dedicated to his men, even though it came at a price. The film truly involves ideas about what gives our lives meaning.”

###

<p style="text-align: center;"><b>THE MAKING AND RESTORATION OF <i>SOUTH</i> (1919), FRANK HURLEY’S FILM OF SHACKLETON’S ENDURANCE EXPEDITION</b></p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------

The birth of film coincided with exploration’s heyday as a competitive sport, a source of national pride and a beacon of scientific discovery. The work of pioneer filmmakers such as Herbert Ponting, Frank Hurley and Capt. John Noel in the remotest corners of the Earth, has fuelled over a century of genre-spanning cinema, helping to slake our thirst for knowledge and our obsession to know more about the extremities of our planet.

The so-called heroic age of Antarctic exploration – broadly from 1897 to the death of Shackleton in 1922 – coincided with the development of film technology and the rise of commercial cinema. The International Geographical Congress was held in the same year as the first flickering images were first projected onto a screen. Many polar explorers saw potential in using this new technology to record expeditions, for research as evidence and to use in the lecture tours that were essential for fundraising as well as celebrating their achievements. Sales of film rights soon became a significant contributor to expedition funding, and sponsors were eager to pay for the entertainment value of such a record. Audiences flocked to see the latest moving pictures from the icy waste, with its otherworldly landscapes and strange animal life.

To hear him tell it, Frank Hurley (1885-1962), the talented and courageous photographer, filmmaker and explorer, was out in the middle of the bush in Queensland, Australia, when he received a telegraph asking him to join Sir Ernest Shackleton’s imperial trans-Antarctic expedition. Hurley was a good storyteller, and he would need to be, to tell one of the most extraordinary tales in the history of exploration on film: what we now know as “South” (1919). “South” (1919) is the film record of Sir Ernest Shackleton’s heroic but ill-starred attempt to cross Antarctica in 1914 through 1916. It is both a unique historical document and a tribute to the indomitable courage of a small party of men who set out on a voyage of discovery that turned into an epic struggle for survival.

Frank Hurley was already an experienced Antarctic traveler when he took up the position of official photographer and cinematographer for Sir Ernest Shackleton’s expedition on the Endurance in 1914. The young Australian was only 26 when he first went to Antarctica with stills and cine cameras as part of Douglas Mawson’s Australasian Antarctic expedition on the Aurora (1911-1914). Hurley’s time with Mawson, including his documentary film “Home of the Blizzard” (1913), plus Herbert Ponting’s success with his Scott footage and stills from the Terra Nova Expedition (1910-1913), persuaded Shackleton that he needed an experienced professional to photograph his expedition. Raising money while on the brink

of war with Germany was a feat of willpower that only someone of Shackleton's determination and persuasive charm was capable of, and the rights to Frank Hurley's films and photographs made a significant contribution.

Shackleton, having been somewhat eclipsed as premier British Antarctic explorer by Scott, planned a brave attempt to cross the continent of Antarctica via the pole. But his ambitious plan faltered soon after the expedition left the island of South Georgia in unusually cold weather, and the *Endurance* became trapped in heavy pack ice. Completely stuck, Shackleton and his crew drifted helplessly northward during the long Antarctic winter while listening to the creaks and groans of the *Endurance* slowly being crushed by the ice. What followed is one of the greatest survival stories ever told, as Shackleton became entirely focused on saving his men — which he did against almost impossible odds.

Frank Hurley had documented their time in the ice, very much as he had seen Herbert Ponting do in his footage of the Scott Terra Nova expedition, although he was determined to go one better with some virtuoso and astonishingly daring shots. For one such, he positioned his camera in front of the ship as it steamed towards it to ram the ice pack, presumably jumping out of the way just in time. There were traveling shots showing the dogs pulling the sleds and an under-cranked shot showing the ice moving eerily as it began to crush the *Endurance*. He also used specially rigged-up lights to produce stunning ghostly images of the ship at night and was filming the sinking ship just as the mast collapsed.

Once the expedition abandoned ship, plans were made to carry the three small boats to find open water. Each man could take only 2 pounds of belongings. Hurley rescued his reels and glass photographic plates from the ship's refrigerator, now under water, and Shackleton, showing considerable foresight, allowed Hurley to keep the three reels of film and 120 of his 400 photographic plates. The reels and plates accompanied him as they over-wintered on the floating pack ice, man-hauled the boats to open water and rowed for six days and nights to make landfall on Elephant Island. Here, the film reels were buried in the permafrost for four and a half months before the men were finally rescued.

When the news broke that Shackleton and his men had survived, there was great demand to hear and see their stories on screen. Frank Hurley spent three months putting together the surviving film footage and photographs from the expedition. Of Shackleton's epic 800-mile sea voyage in the *James Caird* and the crossing of the mountains of South Georgia, nothing, of course, is recorded as the cameras were left behind on the ice.

As Hurley edited his footage at the London offices of the *Daily Chronicle*, which had sponsored the film, he had to fill in the narrative gaps using stills, paintings and intertitle cards. But it wasn't enough, and he was persuaded by the editor, Ernest Perris, to return to South Georgia to capture images that would be popular with the public, Antarctic wildlife (penguins and seals), quite exceptional nature footage for their time, as well as footage of the whaling station. Some footage of the triumphant entry of the rescued explorers, presumably taken by an unnamed local newsreel man in Valparaiso, was also acquired to round out the story. The resulting film, "*South*" (1919), released in cinemas, is an extraordinary achievement in such challenging circumstances.

Shackleton was restless for another adventure but had no funds and still owed money to the financiers of the expedition. In 1919, he launched himself onto the lecture circuit to raise money. He showed Hurley's "*South*" and projected glass slides of his photographs while lecturing the story to the audience. Hurley's film was thereafter shown in various forms as both a lecture film and a conventional theatrical cinema release abroad, including in Hurley's native Australia, where it was released as "*In the Grip of Polar Ice*" in 1920. He had also published his book of the story, "*South*," and was interviewed for various newspapers and magazines.

In 1933, a film with sound was released as "*Endurance: The Story of a Glorious Failure.*" It was "*South*" reedited, with commentary by Worsley, the ship's captain. It also contained coverage of Shackleton's last expedition onboard the *Quest*. Shackleton died on *Quest* from a heart attack in 1922, aged 47.

Frank Hurley became an official war photographer and cameraman during the Great War and in peacetime, establishing himself as Australia's best-known photographer. He also made the documentary films "The Ross-Smith Flight" (1920) and "Pearls and Savages" (1921) and a drama film about life in Papua, "The Jungle Woman" (1926).

He returned to the Antarctic as a filmmaker with Mawson from 1929 to 1931 and made many further documentary and fiction films in the 1930s. During World War II, he served as an official photographer once more before returning chiefly to still photography, publishing a number of popular books documenting the Australia he knew and loved. He died in 1962.

## THE BFI RESTORATION OF *SOUTH*

The original footage from "South" was donated to the BFI (British Film Institute) in the 1950s through a trust set up by the film's original distributor, Sir William Jury. The BFI took up the challenge of restoring Hurley's film back in 1994. There was no one complete original negative source for "South." Overall, 99 different copies of film relating to Shackleton in the Antarctic, varying in length and age, were examined to piece together a restored version of "South" as authentically as possible.

Painstakingly reconstructed by film technician Brenda Hudson at the BFI National Archive J. Paul Getty Conservation Centre, the restoration of "South" uses original camera negative footage from the expedition, prints from the sound reissue, nitrate release prints from the EYE Filmmuseum in the Netherlands with color tinting, as well as 18 photographic glass slides from a box that was deposited with the BFI, along with the film material relating to "South."

Hurley used film stock with a specific mark dating from 1913 to 1914 when he was filming on Endurance, and different film and camera when he returned to South Georgia in 1916. With this information, it was possible to identify the footage that he had shot. When his film was examined, it was discovered that numbers had been written along the side of the film. The numbers seemed to follow the story as written by Shackleton and other crew members. Whenever possible, the numbering system and these accounts were used to place the filmed sequences in order.

Many of the release copies examined had been tinted and/or toned to give them color. There were versions with sequences in blue, green and amber. The original photochemical techniques for color tinting and toning were authentically recreated by the conservation team at the BFI National Archive for the restoration of "South," matching those of the original release prints. A richly colored testament to a remarkable episode in the history of exploration, the resultant restoration, completed in 1998, was recently digitally remastered for the film's centenary, with renewed intertitle cards and a newly commissioned score by Neil Brand.

**By Bryony Dixon, Curator of Silent Film, BFI National Archive**

### **"SOUTH" (1919)**

Production Company: Imperial Trans-Antarctic Film Syndicate

Director of Photography: Frank Hurley

Restoration [1998]: BFI National Archive

With

Ernest Shackleton (expedition leader)

F.A. Worsley (captain of Endurance)

J. Stenhouse (captain of the Aurora)

L. Hussey (meteorologist)

Dr. McIlroy, Mr. Wordie (scientific staff)

Dr. Macklin (doctor)

Frank Wild (second in command of the Endurance)

Tom Crean, Mr. James, Mr. Clark, Mr. Greenstreet (crewmen)

## FILM TEAM BIOS

### **Chai Vasarhelyi and Jimmy Chin (DIRECTORS and PRODUCERS)**

Chai Vasarhelyi and Jimmy Chin are Academy Award®-winning filmmakers and the directors and producers of “Free Solo,” the intimate and unflinching portrait of rock climber Alex Honnold that won seven Emmys, a BAFTA and the Academy Award for Best Documentary Feature in 2019. Their first film together, “Meru,” won the Audience Award at Sundance in 2015 and was on the 2016 Oscar shortlist for Best Documentary Feature. More recently, they directed and produced “Wild Life,” A sweeping portrait of conservationists Kris and Doug Tompkins chronicling their fight to preserve wild land in Chile and Argentina. Other projects include National Geographic’s DGA-nominated and Emmy-winning documentary “The Rescue,” chronicling the against-all-odds rescue of 12 boys and their coach from deep inside a flooded cave in northern Thailand; “Return to Space,” about SpaceX and NASA’s first joint spaceflight, which hit the top 10 on Netflix’s most-watched films list; and two series for National Geographic: “Edge of the Unknown with Jimmy Chin” and “Photographer.” Their first scripted feature, “Nyad,” about Diana Nyad’s 110-mile swim from Cuba to Florida, began streaming on Netflix in the fall of 2023 and garnered Academy Award, Golden Globe, and SAG nominations for both stars Jodie Foster and Annette Bening.

### **Natalie Hewit (DIRECTOR and PRODUCER)**

Natalie Hewit is an award-winning director and producer who has been making primetime documentaries and series for major terrestrial and international broadcasters for over a decade. Her work has received widespread industry recognition and critical acclaim, including nominations for a BAFTA and a Royal Television Society Award for Channel 4’s “Surviving Covid,” a feature documentary filmed over two months inside an ICU ward during the first wave of the COVID 19 pandemic in London. She also received Grierson and Broadcast Award nominations for the BBC’s drama-doc “The Drug Trial: Emergency at the Hospital.” With human narratives at their core, her projects have taken her to numerous remote and highly challenging locations. In 2016, she spent three months filming “Antarctica: Ice Station Rescue” at the Halley VI Research Station for the BBC’s prestigious “Horizon” science series, which was nominated for Best Documentary at the Broadcast Awards. Her work has also led her to collaborate with various high-profile talent, including Greta Thunberg and Louis Theroux. **ENDURANCE** marks her second National Geographic feature and second visit to Antarctica, where she documented the expedition to find the wreck of Sir Ernest Shackleton’s infamous ship in the toughest conditions on the planet. Hewit is known for her passion for narratives that explore what it means to be human, resulting in her work being deemed “Five Stars – Essential” by the Financial Times and “haunting and powerful” by The Guardian.

### **Ruth Johnston (PRODUCER)**

Ruth Johnston is an award-winning producer and executive producer of films ranging from Oscar winner “Summer of Soul (...Or, When the Revolution Could Not Be Televised)” and Oscar nominees “Hunger Ward” and “Lead Me Home” to festival favorites “Reason I Jump” and “Master of Light.” She’s a veteran producer behind hundreds of hours of film, television and interactive digital media projects, including the multiple Emmy-winning “Cash Cab.” As an executive, she was COO of Lion TV in New York and, most recently, general manager of Paul G. Allen’s Vulcan Productions, where she grew and managed a team that became an industry leader in impact storytelling. Today, she’s one of two co-founders of Consequential, a

production and consultancy company operating at the intersection of storytelling and social change. Johnston is currently producing **ENDURANCE** for National Geographic Documentary Films and overseeing production for Consequential's other documentary films while developing several projects across the spectrum of the world's most pressing issues. Consultancy clients include philanthropists, storytellers and platforms optimizing strategies for development, production, distribution, and audience acquisition and activation. An avid traveler, certified rescue diver and sailor who is originally from Northern Ireland, Johnston lives with her family in the Pacific Northwest.

#### **Bob Eisenhardt (PRODUCER/EDITOR)**

Bob Eisenhardt is a filmmaker renowned for editing documentaries and a frequent Little Monster Films collaborator. He is an Oscar nominee, a five-time Emmy winner, and a two-time winner of the Eddie Award from the American Cinema Editors. He has over 60 films to his credit. Eisenhardt edited "Free Solo," the 2019 Academy and BAFTA Award winner, for which he received the ACE Eddie for Best Editing – Documentary. He produced and edited the 2021 BAFTA-nominated and Emmy-winning "The Rescue" and "Wild Life," which premiered at SXSW. His film "Spaces: The Architecture of Paul Rudolph" was an Academy Award nominee for Best Short Documentary. His other films include "Everything Is Copy: Nora Ephron"; "Scripted and Unscripted," which was the winner of ACE Eddie for Best Editing – TV Documentary; "Wagner's Dream," for which he received an Emmy nomination for Editing; "Meru," a Sundance Film Festival Audience Award winner; "Valentino: The Last Emperor"; and "Dixie Chicks: Shut Up & Sing." When not in the editing room, Eisenhardt teaches the thesis master class at both the School of Visual Arts MFA Program and the New York Film Academy.

#### **Carolyn Bernstein (EXECUTIVE PRODUCER)**

Carolyn Bernstein is executive vice president of Documentary Films at National Geographic, where she oversees the award-winning National Geographic Documentary Films (NGDF) banner. Over the last six years, Bernstein has built NGDF into an industry powerhouse, partnering with best-in-class filmmakers to tell gripping, creatively ambitious stories that inspire a deeper connection to our world. Under her leadership, NGDF has earned both awards recognition and commercial success, starting with E. Chai Vasarhelyi and Jimmy Chin's Oscar, BAFTA and Emmy Award-winning "Free Solo." Other notable titles include Oscar-nominated "The Cave," "Fire of Love" and "Bobi Wine: The People's President," and BAFTA-nominated "The Rescue." Upcoming NGDF projects include Sundance Directing Award winner "Sugarcane," along with Oscar winner Daniel Roher's "BLINK" (with co-director Edmund Stenson). Bernstein has also been a scripted television executive for over 30 years, having developed and overseen culture-defining series "Dawson's Creek," "Gilmore Girls," "Smallville," "One Tree Hill," FX's "The Bridge" and Nat Geo's award-winning "Genius" franchise. She is a magna cum laude graduate of Brown University and resides in Los Angeles with her family.

#### **Paul Woolf (EXECUTIVE PRODUCER)**

Paul Woolf has 25 years of experience developing and making documentaries and factual TV series in the U.S. and U.K. He was an executive producer on the Emmy-nominated documentary "Growing Up Down's" (directed by Will Jessop) and the DOC NYC selection "Road To Roxham" (directed by Cristian Gomes). Woolf co-created the BAFTA-winning BBC family series "Operation Ouch" and has developed series and specials for, among others, Netflix, Discovery, ITV, Animal Planet, Sky, Oxygen and Channel 4. Woolf runs Little Dot Studios' premium documentary channel Real Stories, which has more than 12.5 million followers across YouTube, Facebook and TikTok, as well as a number of the company's other digital brands. He has a doctorate in American literature and history.

#### **Ted Richane (EXECUTIVE PRODUCER)**

Ted Richane is a seasoned campaigner, producer and entrepreneur working closely with filmmakers, production companies, funders and distributors from development through distribution to ensure storytelling makes a measurable impact. A co-founder of Consequential, a production and consultancy company operating at the intersection of storytelling and social change, he is an industry leader in building and managing story-driven impact campaigns. He has a proven record of leveraging film to build audiences, change public policy and shift the trajectories of some of society's most pressing challenges. At Consequential, Richane is currently executive producing multiple feature-length documentaries, developing several others and leveraging his experience advising philanthropists, storytellers and platforms on how to optimize story-driven impact strategies. For six years, Richane oversaw publicity, audience

engagement and impact strategy for Paul G. Allen's Vulcan Productions, where he was responsible for maximizing reach and social change for projects spanning ocean health, conservation, climate change and beyond. He combines his 15 years in unscripted entertainment with nearly a decade of experience in Washington, D.C., working in communications for numerous political and advocacy campaigns and serving clients ranging from nonprofit organizations and filmmakers to Fortune 500 companies and foreign and local governments. Richane has a master's in Public Diplomacy from the University of Southern California and an undergraduate degree from Syracuse University. He's a founding board member of the [Impact Guild](#), a backpacker and youth soccer coach and a referee who calls Los Angeles home.

#### **Anna Barnes (EXECUTIVE PRODUCER)**

Anna Barnes is an Emmy-winning producer who runs all aspects of Little Monster Films (LMF), developing content and overseeing the production of films and series from inception to release. Having first worked with Chai Vasarhelyi and Jimmy Chin on their 2015 hit "Meru," she reteamed with them and National Geographic on the record-breaking theatrical release of the Oscar®-winning film "Free Solo." She won an Emmy as part of the producing team on "The Rescue" and has produced or executive produced the series "Photographer" and "Edge of the Unknown with Jimmy Chin" and the films "Wild Life," "Return to Space," "14 Peaks" and the upcoming **ENDURANCE**. Prior to LMF, she worked on many of the top nonfiction films of the past decade, including a long roster of Oscar winners and nominees such as Ezra Edelman's "OJ: Made in America," Matthew Heineman's "Cartel Land," Bryan Fogel's "Icarus," Yance Ford's "Strong Island," RaMell Ross' "Hale County: This Morning, This Evening" and Gianfranco Rosi's "Fire at Sea." As an executive at Cinetic Media, she oversaw the distribution campaigns for many successful documentaries, such as the Oscar-nominated Banksy documentary "Exit Through the Gift Shop" and Asif Kapadia's "Senna." Barnes started her career in Boston working with legendary filmmaker and Oscar-winner Frederick Wiseman.

#### **Dan Jones (EXECUTIVE PRODUCER)**

Dan Jones is an International Emmy and quadruple BAFTA-winning executive producer and the CEO of Little Dot Studios, the pioneering content studio and digital media network. Jones has worked at the forefront of the convergence of TV and social platforms for more than two decades, leading numerous world-first productions and collecting seven Royal Television Society Awards and seven Broadcast Digital Awards.

#### **Bill Locke (EXECUTIVE PRODUCER)**

Bill Locke is head of Programming at History Hit, overseeing all the film output of this digital broadcaster and production company. In this role, he has made films on everything from prehistoric archaeology to the Inca and Anne Boleyn, winning the coveted best Specialist Channel at the Broadcast Digital Awards in 2023. Locke was in charge of History Hit's coverage of the Endurance22 expedition throughout the voyage, remotely guiding editorial output in Antarctica. Prior to History Hit, Locke was head of Specialist Factual at Lion Television, a major international production company. During his 20 years at Lion, he won Emmys, UNESCO and One World Awards, as well as gaining BAFTA nominations.

#### **Donald Lamont (EXECUTIVE PRODUCER)**

Donald Lamont was born on 13 January 1947 in Aberdeen, Scotland. He attended Aberdeen Grammar School and graduated from Aberdeen University with a First Class Honors Degree (MA in Russian Studies). The University later awarded him an honorary Doctorate of Laws (DLL). Donald spent four years in the British motor industry and in 1974 joined Her Majesty's Diplomatic Service. His first job was as desk officer dealing with deep sea mining, then the subject of negotiations at the UN Conference on the Law of the Sea. Donald was then posted to Vienna, dealing principally with the International Atomic Energy Agency and the UN Industrial Development Organisation. From 1980-82 Donald was First Secretary (Commercial and Scientific) at the British Embassy, Moscow, where he met his wife, Lynda, a Geography graduate of Glasgow University who was also working at the Embassy. On return to London, Donald served for three years on the Argentine Desk at the Foreign Office, followed by three years on the Economic and Social side of the United Nations, including counter-narcotics policy and addressing the new challenges of HIV-AIDS. After a spell at the International Institute for Strategic Studies Donald was posted in 1988 as Political Adviser to the British Commandant in Berlin. That involved responding to the Fall of the Berlin Wall in 1989 and movement towards German Unification. The Foreign Office then posted Donald as British Ambassador to Uruguay. He and Lynda spent three years in Montevideo with



Louise (b. 1986) and Ian (b. 1988) before returning to London in 1994 to head the Foreign Office Department dealing with relations with Ireland. There followed a secondment in Sarajevo as Chief of Staff to the High Representative, a post created by the Dayton Accords that ended the conflict in ex-Yugoslavia. From Bosnia Donald and Lynda headed to the Falkland Islands, where Donald served as Governor and as Commissioner for South Georgia and the South Sandwich Islands. Donald's final posting was as Ambassador to Venezuela (2003-2006). On retiring from the Diplomatic Service Donald was first contracted as Chief Executive of Wilson Park, a conference center managed by the UK Foreign Office. Subsequently Donald was involved with a number of charities that reflected his involvement with South America and the Falkland Islands, including Sistema Scotland, a Venezuelan-inspired charity aimed at transforming children's lives through the orchestra. He was a founding Trustee and Chairman of the Falklands Maritime Heritage Trust, established in 2014, that organized and funded the Endurance22 Expedition that located, surveyed and filmed the wreck of Shackleton's *Endurance*.

## FILM PARTICIPANT BIOS

### **Dr. John Shears (FILM PARTICIPANT)**

Dr. John Shears is a British polar geographer and expedition leader. Dr. Shears has a first-class degree and Ph.D. in geography from the University of Southampton. After successfully completing his academic studies, Dr. Shears began his career in polar research and exploration in 1990. He has well over 30 years of experience working in both Antarctica and the Arctic, first with the British Antarctic Survey (BAS), then the Scott Polar Research Institute at the University of Cambridge, and now running his own polar consultancy business, Shears Polar Limited. Since 2017, Dr. Shears' polar expeditions have focused on the search for Shackleton's ship *Endurance* in Antarctica, although he first advised on the possibility of a search mission for the lost ship in 2005 while at BAS. In 2019, he was the expedition leader for the Weddell Sea expedition. Then, in 2022, he was the expedition leader of *Endurance22*, which made the historic discovery of *Endurance* on March 5, 2022, at a depth of 3,000 meters under the ice. Dr. Shears is the co-author with Nico Vincent of the National Geographic book "*Endurance: The Discovery of Shackleton's Legendary Ship*," described by National Geographic as a companion to the documentary movie. Dr. Shears is a long-standing fellow of the Royal Geographical Society, a former vice president of the Society, and a chartered geographer. He is a fellow of The Explorers Club and a recipient of an Eric and Wendy Schmidt Explorers Club Visionary Award in 2024. Dr. Shears was awarded the Polar Medal by Her Majesty the Queen in 2019 in recognition of his "outstanding achievement and service to the United Kingdom in the field of polar research." In 2023, Dr. Shears became a visiting professor in the School of Geography and Environmental Sciences at the University of Southampton. He lives near Cambridge in the U.K.

### **Nico Vincent (FILM PARTICIPANT)**

Nico Vincent is a subsea engineer, surveyor and underwater vehicle manager with more than 30 years of experience on deep-sea projects, including the discovery and survey of many significant shipwrecks. He started his career in France at COMEX with its legendary chairman Henri Delauze (the French equivalent of Capt. Don Walsh, the conqueror of the Challenger Deep). Today, Vincent is recognized as the "special project maker" for deep-sea missions around the world. He's also a subsea consultant for the Bureau d'Enquêtes et d'Analyses pour la sécurité de l'aviation civile (BEA, the French equivalent of the U.S. Federal Aviation Authority). He and his team hold four world records, including the recovery of the world's deepest cargo of silver coins from the wreck of SS *City of Cairo* on behalf of the U.K. government; they supported the location of the fighter plane of Antoine de Saint-Exupéry; and, they worked with explorer Victor Vescovo to discover the world's deepest wreck: the USS *Samuel B. Roberts*, a World War II destroyer escort found 22,621 feet (6,895 meters) deep in the Philippine Sea. They have also located the missing naval submarines *AJA San Juan* and *La Minerve* and helped investigate significant air accidents, including Air France AF447 in 2009, Malaysia Airlines Flight MH370 in 2014 and EgyptAir Flight MS804 in 2022. Vincent was the point of contact ashore for the Weddell Sea expedition in 2019 regarding subsea operation. Following the failure of this first expedition, he worked for over three years to plan the search and discovery of *Endurance*. He created unique procedures for subsea operations, chose new, never-before-used technology and developed all operations plans for the project. Vincent co-authored with Dr. John Shears the National Geographic

book “Endurance: The Discovery of Shackleton’s Legendary Ship,” scheduled for worldwide publication on Nov. 5, 2024. Vincent is a member of the Society of Underwater Technology, la Société des Explorateur Français, and The Explorer Club, who awarded their prestigious Citation of Merit in 2024 on behalf of the Endurance22 team for the discovery of Endurance. Vincent is now the operations manager of Deep Ocean Search Ltd. and lives in Marseille, France.

### **Mensun Bound (FILM PARTICIPANT)**

A fifth-generation Falkland Islander, Mensun Bound studied in the United States, where he was a research assistant at the Metropolitan Museum of Art in New York before moving to Oxford University on scholarship in 1978. While a research fellow at St Catherine’s College in the 1980s, he founded the first academic unit for maritime archaeology in England. Later, he was appointed the Triton Fellow in Maritime Archaeology at St Peter’s College. He is a fellow of the Royal Geographical Society, the Royal Canadian Geographical Society and the Explorer’s Club. Known as the “Indiana Jones of the Deep,” Bound has conducted wreck surveys and excavations all over the world in a career that spanned more than 40 years. In 1981, he excavated one of the oldest known shipwrecks (an Etruscan ship from 600 BC), and in 1997, he used saturation diving methods in the South China Sea off Vietnam to carry out the deepest hands-on shipwreck excavation there has ever been. In 2019, Bound stunned the world with his discovery of Admiral von Spee’s flagship, Scharnhorst, which had been lost in battle during World War I. In addition, Bound has raised a number of exceptional individual artifacts such as the statuette of a rising dragon now in the British Museum, a gun from the German pocket battleship Graf Spee in the River Plate and from Lord Nelson’s favorite ship, HMS Agamemnon, the only cannon that is proven to have been fired at the Battle of Trafalgar, Britain’s greatest victory at sea. Twelve museums around the globe hold permanent displays of material excavated by Bound. In August 2012, Bound was at a meeting in a London coffee shop when the project to find Shackleton’s Endurance was conceived. In 2019, he became the director of exploration on the first search to find the “unreachable” ship beneath the ice, which ended in failure when their Autonomous Underwater Vehicle (AUV) disappeared without a trace. In 2022, the search resumed with Bound in the same role, this time under the auspices of the Falklands Maritime Heritage Trust, of which Bound is a trustee. On March 5, the Endurance was found at a depth of 3000 meters under the ice, and as predicted by Bound, it was upright, largely intact, proud of the seabed and in an excellent state of preservation. His journey to find the Endurance is chronicled in his bestseller “The Ship Beneath the Ice: The Discovery of Shackleton’s Endurance” (Ed. Macmillan, 2022). His next book, “Wonders in the Deep” (with Mark Frary, Ed. Simon and Schuster, September 2024), is about maritime archaeology, beginning with the watercraft of the ancient Egyptians and ending with the Endurance.

### **Dan Snow (FILM PARTICIPANT/EXECUTIVE PRODUCER)**

Dan Snow is a BAFTA-winning history broadcaster and bestselling author. He hosted dozens of history documentaries for the BBC, Discovery, The History Channel and others before founding the multiple award-winning digital history platform History Hit in 2015. He has visited hundreds of historical sites, from the Arctic to the Antarctic and from Hawaii to the Himalayas. He was the onboard historian on the successful expedition to find the wreck of Shackleton’s ship Endurance in 2022. He lives in a house that was used as a World War II special forces training facility with his wife and three kids.

## **PRODUCTION COMPANIES**

### **Little Dot Studios**

Established in 2013, Little Dot Studios is an award-winning content studio and digital media network with the mission of reaching and captivating diverse audiences through innovative and impactful storytelling, with a focus on producing premium content across social platforms, digital streaming networks and traditional TV channels. The studio became the first production company to win a BAFTA for a YouTube-first documentary for “Missed Call,” directed by Victoria Maplebeck, and also the first BAFTA for a film shot entirely on iPhone. With the CBC, the studio co-produced “Take Me To Prom,” which won a 2020 Canadian Screen Award, and “Road To Roxham,” a DOC NYC selection. History Hit, the Little Dot Studios’ owned and operated SVOD service and podcast network, also produces 50 original documentaries each year and has won numerous awards, including Best Specialist Channel for two consecutive years at the 2023 and 2024

Broadcast Digital Awards, as well as producing two series: “The World’s Greatest Discoveries with Dan Snow” and “The Black Death” for the U.K.’s terrestrial Channel 5. Recent output of originals includes the innovative BBC iPlayer series “Inside Cinema,” the long-form BBC documentaries “Guilty Pleasures” and “Meet the Family,” and the premium arts series “Gagosian Premieres.” Little Dot Studios’ portfolio also includes “Secret Superpowers with Tom Daley” for Snap Originals; “Random Acts” for Channel 4; “The Race For Clean Air” for United Nations and Formula E, which was distributed across Discovery channels globally; “Race for the Planet” for Fox Sports; “Frankie Dettori: A Royal Ascot Love Affair,” broadcast on over 20 networks worldwide, including ITV4, Sky Sports, NBC/Peacock, Entain and Virgin Media; as well as “In Your Face” for Real Stories, which has garnered over 100 million views across platforms, and multiple award-winning documentary “Surf Girls Jamaica,” both for Real Stories. The studio works with the world’s most recognized brands, creating premium video and podcast content for more than 700 social channels globally. The company is responsible for over 10 billion organic views per month and runs a digital broadcast network of more than 80 channel brands across social platforms and FAST. Little Dot Studios also incorporates sports-specialist production arm WING and owns social media reporting and analytics platform Locowise. Verified carbon neutral since its inception, the company measures and reports on its carbon footprint annually and implements policies to reduce environmental impact, aiming to be net-zero by 2025. Little Dot Studios is an All3Media company.

### **Consequential**

Consequential creates meaningful films, content and campaigns. Founded by entertainment and impact experts Ruth Johnston and Ted Richane, Consequential works with filmmakers, philanthropists, production companies and investors to tell the best possible stories exploring the most important issues of our day. Together with our partners, Consequential puts that content to work in pursuit of measurable change.

Current Consequential productions include **ENDURANCE** (directors Chai Vasarhelyi, Jimmy Chin and Natalie Hewit), “Speed of Rust” (director Skye Fitzgerald), “Six Degrees From Science” (director Marilyn Ness), “Rebel by Design” (directors Scott B and Sandy Guthrie) and an untitled music documentary (to be announced). Others in active development will use cutting-edge technology and innovative filmmaking to explore the impacts of the climate crisis today on people and communities, the science behind our own consciousness, and how better understanding women’s health can fuel athletic performance.

### **History Hit**

History Hit, the podcast, SVOD and content platform founded by historian Dan Snow and acquired by award-winning content studio and digital media network Little Dot Studios, is a premium media network focused on making history more accessible in the digital age. History Hit TV, its SVOD service, was launched in November 2017, focusing on original history programming aimed at an audience that loves real history. The channel covers history across the globe. Notable recent expeditions have included Jordan, China and Peru, as well as popular British subjects such as Anne Boleyn and Richard III. New stories are frequently broken on History Hit TV, from the discovery of Thomas Cromwell’s long-lost prayerbook to an Anglo-Saxon warriors’ cemetery and the forgotten skeletons of the Battle of Waterloo. With over 750 documentaries, interviews and hundreds of original films, History Hit TV won the Best Specialist Channel for two consecutive years at the 2023 and 2024 Broadcast Digital Awards. History Hit also works as a production company and, in the last three years, made 15 films presented by Dan Snow for Channel 5. The podcast arm of the media network publishes eight hugely successful podcast series, including the chart-topping “Dan Snow’s History Hit,” which is published three times a week. Other podcasts within their network include biweekly shows “Betwixt the Sheets with Kate Lister” and “American History Hit with Don Wildman.” The network publishes 16 podcast episodes a week for enthusiasts of all eras, from ancient times to present day, and won the silver award for Best Network at the 2023 British Podcast Awards. Leveraging Little Dot Studios’ content management, acquisition and distribution expertise, History Hit has grown its social media platforms by more than 2.5 million followers and launched a FAST channel across all major streaming platforms in 2022. Additionally, the History Hit YouTube Channel offers up to three new releases each week that feature prominent figures and significant topics from the history world. The channel boasts a diverse array of original formats, including “Who Was The First?,” “Historical Google Questions,” “Could You Survive?” and in-house produced historical movie reviews. Garnering an

impressive 7 million views per month and over 1.5 million hours of content consumed monthly, History Hit continues to captivate and educate its growing audience.

### **Little Monster Films**

Little Monster Films is an Academy, BAFTA and multiple Emmy Award-winning production company founded by Chai Vasarhelyi and Jimmy Chin. Our mission is to capture humanity at its best, aiming to reflect a diverse world both in front of and behind the camera. The studio presents grounded narratives with intensity and depth while showcasing the extraordinary among us who push the limits of human potential. The 2021 documentary “The Rescue,” about the world-famous rescue of the boys’ soccer team from a cave in Thailand, won the People’s Choice Award for Best Documentary at the Toronto International Film Festival, was nominated for a BAFTA, and won three News & Documentary Emmys. Previously, the groundbreaking film “Free Solo” was awarded a BAFTA and the Academy Award for Best Documentary Feature in 2019. The film also received seven Emmy Awards. Little Monster’s latest film, “Wild Life,” an environmentalist love story, recently premiered in theaters and on Disney+. The studio’s first scripted feature, “Nyad, about Diana Nyad’s 110-mile swim from Cuba to Florida, began streaming on Netflix in the fall of 2023 and garnered Academy Award, Golden Globe and SAG nominations for its stars, Jodie Foster and Annette Bening. Our latest series with National Geographic, “Photographer,” is now streaming on Disney+. [www.littlemonsterfilms.com](http://www.littlemonsterfilms.com)

### **The Falklands Maritime Heritage Trust**

The Falklands Maritime Heritage Trust was established in 2014 with the aim of bringing to a global audience stories of ships and their crews who have faced the challenges of the sea around the Islands and beyond. The first major project that the Trust undertook was a search for vessels of the Imperial German Navy sunk early in World War I during the Battle of the Falklands. Mensun Bound, a trustee, Falkland Islander and marine archaeologist, led an expedition in 2019 that located and filmed the wreck of SMS Scharnhorst, sunk in that battle. As the Royal Navy and the Kaiser’s ships were exchanging fire on Dec. 8, 1914, Sir Ernest Shackleton and his men had entered the pack ice of the Weddell Sea on board Endurance. In its planning for the Endurance22 expedition, the Trust accorded priority to telling the story of the expedition to worldwide audiences through a documentary, podcasts, livestreams and cutting-edge use of social media. The Trust engaged the Royal Geographical Society and Reach the World to produce material to engage young audiences, bringing the expedition live into classrooms in a unique, pioneering effort. It chose Little Dot Studios, with History Hit and Consequential, to make the documentary and National Geographic, who have shown a passion for the story of Shackleton, his men and Endurance over many years, to bring that documentary to fruition and inspire new audiences with the story of two expeditions a century apart.

## EDUCATIONAL RESOURCES

### **Little Dot Studios Produced Education Videos:**

*\*Produced for the Falklands Maritime Heritage Trust and its education partners Reach the World and Royal Geographical Society.*

- [LIFE AS AN ANTARCTIC RESEARCHER](#)
- [ON BOARD SA AGULHAS II WITH CAPTAIN KNOWLEDGE BENGU](#)
- [TESTING, BREAKING, FIXING](#)
- [SHACKLETON IN FOCUS](#)
- [ANTARCTIC WILDLIFE](#)

### **Royal Geographical Society**

The Royal Geographical Society (with IBG) worked with Endurance22 to produce free resources for Key Stage 1 and 2 geography and history lessons, which draw on the Society’s Collections of polar maps, photographs, documents and artifacts. These resources allow pupils to explore changes in polar exploration from the early 20<sup>th</sup> century to today and the different motivations for why people visit Antarctica, as well as this continent’s unique frozen environment.

**Royal Geographical Society Assets:**

<https://www.rgs.org/endurance22>

**Reach the World**

Reach the World organized virtual exchange programming with 33,000+ Kindergarten through 12<sup>th</sup>-grade students around the world during the Endurance22 expedition. Through [student-focused articles](#) and [interactive livestream events](#) before, during and after the Endurance22 expedition, students went on a year-long journey alongside the expedition team, peaking with the discovery of Endurance in March 2022. The kids were some of the first to know about the discovery. All of [Reach the World's Endurance22 virtual exchange resources](#) are available on-demand (at no cost). There are now three successive academic year cohorts of students who know all the Endurance22 characters and have a personal connection to this story.

**Reach the World Assets:**

[Endurance Student-Focused Articles](#)

[Interactive Live Stream Events](#)

[Endurance22 Virtual Exchange Resources](#)

<b>FINAL CREDITS</b>
----------------------

National Geographic Documentary Films Presents

A Little Dot Studios, Consequential & History Hit Production

In Association with Little Monster Films

A Film by  
ELIZABETH CHAI VASARHELYI  
JIMMY CHIN  
NATALIE HEWIT

Directed & Produced By  
ELIZABETH CHAI VASARHELYI  
JIMMY CHIN  
NATALIE HEWIT

Produced By  
RUTH JOHNSTON PGA

Produced & Edited By  
BOB EISENHARDT ACE

Executive Producers  
PAUL WOOLF  
TED RICHANE  
ANNA BARNES

Executive Producer  
CAROLYN BERNSTEIN

Executive Producer  
ANTHONY CLAKE

Executive Producers

DAN JONES  
DAN SNOW  
BILL LOCKE  
DONALD LAMONT

Co-Edited by  
SIMONA FERRARI

Director of Photography  
FRANK HURLEY

Directors of Photography  
CLAIR POPKIN  
WOLFGANG HELD  
CAM RILEY

Music By  
DANIEL PEMBERTON

Music Supervisor  
SUSAN JACOBS

**2022 Expedition Crew**

Senior Shooting Producer  
NICK BIRTWISTLE

Directors of Photography  
PAUL MORRIS  
JAMES BLAKE

Shooting Producer & Media Manager  
SAUNDERS CARMICHAEL-BROWN

THANKS TO THE FALKLANDS MARITIME HERITAGE TRUST, WHICH ORGANIZED AND FUNDED THE  
SUCCESSFUL ENDURANCE22 EXPEDITION

Featuring  
CAPTAIN KNOWLEDGE BENGU  
MENSUN BOUND  
MAEVA ONDE  
LASSE RABENSTEIN  
JOHN SHEARS  
DAN SNOW  
NICO VINCENT  
CHARLES J. GREEN  
LIONEL GREENSTREET  
FRANK HURLEY  
LEONARD D.A. HUSSEY  
ALEXANDER H. MACKLIN  
SIR ERNEST H. SHACKLETON  
FRANK WORSLEY

Line Producer  
DEVORAH DEVRIES

Archival Producer

BRIANA BIERMAN

Post-Production Supervisor  
CHRISTINA HUNT

Lead Assistant Editor  
ADAM BARBATO

Supervising Sound Editor  
DEBORAH WALLACH

Re-Recording Mixers  
TOM FLEISCHMAN CAS  
RIC SCHNUPP CAS

Production Supervisor  
MIRIAM NASIEKU LESHIMPIRO

Production Accountant  
BARBARA KAREN

Associate Producer  
CAMERON POWRIE

Assistant Archival Producer  
RUBY LANET

Development Executive  
ROCKY COLLINS

Production Coordinator  
EMMA FRANCES SOVIERO

Archival Assistant  
LUMIERE ROSTICK

Assistant Editors  
LINDSAY HUANG  
ZIJUN CATHY YOU

Post-Production Coordinators  
SUTTON REVELL  
JAKE SCHICK

**Little Dot Studios, an All3Media Company**

Founders  
ANDY TAYLOR  
SELMA TURAJLIC

General Counsel  
JAY TALLON

Head of Production  
HAL ARNOLD

Head of Press  
CLAIRE SCOTT

Head of Finance  
DINO CAMPANARO

Development Executives  
ALEX HRYNIEWICZ  
RICH PAYNE

Chief Operating Officer  
KEVIN GIBBONS

Business Affairs  
ALICE HYDE  
LAURA RIDLEY

Location Manager  
ELLIE AITKEN

Post-Production Supervisor  
TOM CHEATER

Representation  
CAA

Financial Controller  
HEENA HIRANI

Assistant Accountants  
AYE AUNG  
SINDHU YOGU

All3Media America  
STEPHANIE ROSENBERG  
KELSEY BOXSER

**Little Monster Films**

Vice President of Production  
AIDEEN KANE

Production Supervisor  
ZOE SUA CHO

Post-Production Coordinator  
PAUL LAUKAITIS

Assistants to Elizabeth Chai Vasarhelyi & Jimmy Chin  
WILSON KUNG  
ERIN WALSH

**UK Production**

Story Consultant  
CHLOE MAMELOK

Archivists  
KATE GRIFFITHS  
MIKE GRIFFITHS



Location Manager  
YANA YANKOVA

Production Coordinator  
STOYAN STOYANOV

Pre-Production Editors  
PAUL ZELLER  
ALISTAIR MARTIN

Assistant Editors  
JOE AMOS  
ISRAR HUSSAIN  
ANDREW CHAMBERS

Post-Production Assistant  
IAIN MOSS

Shooting Producers  
ALISDAIR MAY  
STEPHEN MIZELAS

First Assistant Camera  
JAMES WICKS

Second Assistant Camera  
KLARA RYCHTARCIKOVA

Data Wrangler  
CRESCENCIO FERREIRA

Additional Tech Support  
JAMES McFARLANE

Gaffer  
OWAIN MORGAN

Sparks  
HARRISON NEWMAN  
CAMILLE DAZZI  
TOME FERREIRA

Sound  
NIKOS NIKOLALAIOS  
MARCO IAVARONE

Research Consultant  
STEPHEN SCOTT-FAWCETT

Designer  
ANCE PRIEDNIECE

Production Assistants  
TOM BROWN  
LYDIA COLLINS  
VALENTINA FIORIO  
RO GREENGRASS

MICHAEL HOLMES  
ALEX JONES  
LIAM OFFORD

Additional Archival Research  
KATIA LOM

**United States Production**

First Assistant Camera  
GRAHAM DENEEN  
JACQUES LANG  
KYRA KILFEATHER

Gaffers  
JACK FOSTER  
JOE FOLEY  
ATSUSHI TAKAOKA

Camera Production Assistant  
PETER ACKERMAN

Sound  
ANA FERNANDEZ

Hair / Makeup  
NYCKI FRANGIPANE

Media Manager  
ZAKIR TABINI

Production Assistant  
JONATHAN CORNIER

Expedition Stills Photographer  
ESTHER HORVATH

VFX  
PANDA PAW VFX  
KIM MACK  
BRIDGET CONNELL

Production Counsel  
CHRIS PEREZ  
JONATHAN FISHER  
DONALDSON CALLIF PEREZ, LLP

Fair Use Counsel  
PETER JASZI  
BRANDON BUTLER  
JASZI BUTLER PLLC

**Denmark Production**

Fixer  
ANDERS WØLDIKE SCHMITH

Field Producer  
NICKY REFSING

First Assistant Camera  
FRANZ BORDE

Media Manager  
KALE JESSEN

Gaffer  
JENS LUND

Sound  
BYRON MEYER

**South Africa Production**

Assistant Producer  
CHRIS LOGAN

Fixer  
RICK MATTHEWS

First Assistant Camera  
REG MARITZ

Media Manager  
ROBERT COWLING

Gaffer  
KARL WAUGH

Best Boy  
REMY GUIMEZONG

Spark  
DESMOND SUWENI

Sound  
HENAU MARAIS

Production Assistant  
KYLE JASON BRANDT

Chaperone  
EBRAHIEMA V. SCHYFF

**Sub-Sea Science and Technology**

VOYIS  
McGILL UNIVERSITY  
DEEP OCEAN SEARCH  
OCEAN INFINITY  
SAAB  
CLAIRE SAMUEL  
JOHN KINGSFORD  
OLIVER PLUNKETT  
CORETI

## **AI Voice Conversion – Respeecher**

Business Development Executive  
VOLODYMYR OVSIENKO

Chief Operating Officer  
VITALII KNYR

Delivery Manager  
NATALIA STATYVKA

Synthetic Speech Artists  
ANTON PRYKHODKO  
DMYTRO VASYLETS

## **Lead Recreation Team**

Founder / Recreation Executive Producer  
NICK MARTINI

Founder / Partner for STEPT  
ALEX MARTINI

Chief Financial Officer for STEPT  
JEREMY NEEDELMAN

Recreation Executive Producer  
BRENDAN VARNI

Recreation Producer  
ERIC COOK

Head of Post-Production for STEPT  
CONNOR SCOFIELD

Business Affairs Manager for STEPT  
KATE BLASCO

Production Designer  
TYE WHIPPLE

Costume Designer  
LISA MADONNA

## **Los Angeles Recreation Production**

First Assistant Director  
CHRIS NORTHUP

First Assistant Camera  
JUSTIN MIKE

Production Supervisor  
JANEVA TURTON

Production Consultant  
JAMES HEYWARD

Digital Imaging Technician  
ZACK LYALL

Unit Photographer  
JASPER POORE

Gaffer  
TRISTAN MOFFATT

Best Electric  
TRAVIS MOFFATT

Set Lighting Technicians  
ERIC GILBERT  
JULIAN ROSS

Key Grip  
JASON RUPE

Best Grips  
JESSE RUPE  
JACKSON RICHARDSON

Grip  
JAMIE LIND

Art Coordinator  
DRÖFN SNORRADÓTTIR

Set Decorator  
HILLARY ANDUJAR

Prop Master  
COLEMAN GUYON

Prop Assistant  
FIONA JETT ROBINSON

Set Decorator Assistant  
COURTNEY ANDUJAR

Driver  
MARKO PRELIC

Special Effects Coordinator  
JESSE NOEL

Special Effects Prop Makers  
TIM GEARY  
MARK NOEL

Special Effects Makeup / Hair  
NELSON COOPER

Special Effects Makeup / Hair Assist  
FAINA RUDSHTEYN

Costumer

ADAM ARCOS

Fire Safety Officer  
TOM RICHARDSON

Medic  
JOHN LUSBY

Location Permit Coordinator  
TIM BALLOU

Continuity  
ELYSSA BUDD

Assistant to Nick Martini  
KATIE GRANT

Production Assistants  
EDWARD CRUZ  
CARLOS SALAZAR

**Los Angeles Recreation Cast**

Sir Ernest H. Shackleton  
MATT SAVINS

Frank Worsley  
SHAWN FRAMBACH

Frank Hurley / Alexander H. Macklin  
MICHAEL CAPRARELLA

Leonard D.A. Hussey  
CHRIS PERIKO

Lionel Greenstreet  
DAVID PROTTAS

**Recreation Post-Production – LOCKT Editorial**

Post Executive Producer for LOCKT  
TIM BALDINI

Post Producer for LOCKT  
NICOLE JOHAL

Head of Visual Effects  
RYAN REEB

Visual Effects Coordinator  
JOHN MURPHY

Virtual Production Supervisor  
EVE ROTH

Computer Graphics Artists  
GRACE FERRERA

FABRICIO HERRERA

Media & IT Manager  
NATE LAWRENCE

**Virtual Production – PHNTM**

Virtual Production EP for PHNTM  
JEFF BROADWAY

Virtual Production Head Engineer  
LANCE VAN NOSTRAND

Virtual Production LED Engineer  
PHILIP LIDDELL

Unreal Engine Operator  
RJ LODRIGUEZA

Virtual Production Supervisor  
RYLAN HOMSCHEID

Virtual Production Preparation Coordinator  
RENE HERNANDEZ

Virtual Production Stage Manager  
STEVEN MENDOZA

**Iceland Recreation Production**

Line Producer – Swixer  
BECKY TOWERS

Iceland Producer  
DÖGG MÓSESDÓTTIR

Production Coordinator  
MARÍA LEA ÆVARSDÓTTIR

Iceland Associate Producer  
KITTY VON-SOMETIME

Location Supervisor  
HARALDUR BJARNASON

First Assistant Camera  
KYLE DALY

Second Assistant Camera  
SVAVA LOVÍSA AÐALSTEINSDÓTTIR

Digital Imaging Technician  
SÖLMUNDUR ÍSAK STEINARSSON

Production Sound Mixer  
NICOLAS LIEBING

Gaffer  
ÆGIR JENS GUÐMUNDSSON

Best Electric  
ANDRI FREYR HLYNSSON

Key Grip  
HALLGRÍMUR ODDSSON

Spark  
ÁLFGERÐUR MALMQUIST

Props  
TINNA OTTESEN

Special Effects Supervisor  
EGGERT KETILSSON

Senior Special Effects Technicians  
FREYR ÁSGEIRSSON  
GUNNAR KVARAN

Special Effects Technicians  
VALDIMAR JÓHANNSSON  
JÖKULL JÓNSSON

Carpenter  
STEINGRÍMUR I. STEFÁNSSON

Painter  
HELGI JÓHANNSSON

Special Effects Makeup / Hair  
HAFDÍS KRISTÍN LÁRUSDÓTTIR

Special Effects Makeup / Hair Assistant  
EVA ÞORSTEINSDÓTTIR

Costumer  
INGIBJÖRG JENNY

Production Assistants  
ANNA SÆUNN ÓLAFSDÓTTIR  
TRISTAN GYLFI BALDURSSON  
KRISTÍN ÓSK SÆVARSDÓTTIR

Art Assistant  
ISLEIFUR PÁDRAIG FRIDRIKSSON

Production Bus Drivers  
FANNAR VÍÐIR HARALDSSON  
SNORRI ÞÓRSSON

Helicopter Pilot  
CHRISTIAN HALLER

Medic



GUÐMUNDUR GUÐJÓNSSON

**Iceland Recreation Cast**

Sir Ernest H. Shackleton  
ÓSKAR ARASON

Frank Worsley  
STEPHAN MANTLER

Tom Crean  
LAURENT JEGU

Endurance Crew  
HAUKUR EMIL KAABER  
KRISTJÁN ELDJÁRN KRISTJÁNSSON  
GUÐMUNDUR R. SIGTRYGGSSON

**Recreation Costumes Provided by BURBERRY**

Brand Curator, Archive  
CARLY ECK

Technical Development & Quality  
LUTF REHMAN

**Graphics by BGSTR**

Chief Creative Executive  
JOSH NORTON

Design Supervisor  
ROSS HENDERSON

Executive Producer, EVP for BGSTR  
CARSON HOOD

Supervising Producer for BGSTR  
KRISTEN PRITCHETT

Producer for BGSTR  
PAULINA CASEY

Design  
RILEY CARSON  
CAROL CAI

Main Title Animation  
CARL DEMPSEY

Animation & Color Treatment  
LIU CHIA-LUNG  
CHRISTOPHER SCALES  
ELIJAH BEN  
MARVIN PEREZ  
PAUL VOLANTE

NATE SCHMITT

**Post-Production Sound**

Sound Effect Editors & Design

RIC SCHNUPP CAS  
GRANT ELDER

Assistant Sound Editor

TYLER NEWHOUSE

Foley Editor & Mixer

ROLAND VAJS

Foley Artists

FILIFE CHAGAS  
LUCIA CARVALHO

Post-Production Mix Facility

SOUNDTRACK NEW YORK

Sound Re-Recordist

ALEX URIATI

VO Mixer

MARK DESIMONE CAS

Sound Facility Coordinators

CARLIE BERGMAN  
LINDSAY ABEL

Score Produced By

DANIEL PEMBERTON

Additional Mixing By

SAM OKELL

Electronic Instrument Design

ALEX GRUZ

Music Editor

BEN SMITHERS

Additional Music Editor

JONATHAN ZALBEN

Music Coordinators

ASHTON CAMPBELL  
JACKIE MULHEARN

Additional Sound Facilities

KAA PRODUCTION  
THE SOUND COMPANY

### **Color & Finish by Company 3**

Supervising Colorist  
STEFAN SONNENFELD

Colorist  
ANDREW GEARY

Online Editors  
JOSH PERAULT  
NICK FIGUEROA

Finishing Producer  
KATE ALBERS

Features Coordinator  
ANTHONY ROMAGUERA

Color Assistant  
ANDREW MIRMANESH

Deliverables Producer  
JOE MONGE

Deliverables Coordinator  
TIERA JOLLY

Finishing Executive  
JIM GARDNER

Head of Production  
MICHAEL MAIDA

### **Voices**

Casting  
LIZ LEWIS CASTING  
RACHEL REISS

Voice Actors  
TIM PALMER  
JOHN HEDIGAN  
DAVID ROSENBERG  
JEFFERSON REARDON  
TIM GARNER

**Endurance22 Partners**  
AALTO UNIVERSITY  
AFRICAN MARINE SOLUTIONS  
ALFRED WEGENER INSTITUTE  
DUNDEE HERITAGE TRUST  
DRIFT AND NOISE

ROYAL SCOTTISH GEOGRAPHICAL SOCIETY  
SOUTH GEORGIA HERITAGE TRUST  
STELLENBOSCH UNIVERSITY  
UK ANTARCTIC HERITAGE TRUST

**Royal Geographical Society**

JOE SMITH  
CHRISTINE JAMES  
JAMIE OWEN  
ALASDAIR MacLEOD  
LUCY PRESTON  
CLAIRE BROWN

**Scott Polar Research Institute, University of Cambridge**

NEIL ARNOLD  
NAOMI BONEHAM  
LUCY MARTIN

**Reach the World**

HEATHER HALSTEAD  
TIMOTHY JACOB  
BRIANNA ROWE  
ZIEV DALSHHEIM-KAHANE  
COLIN TEAGUE

**The Explorers Club**

RICHARD GARRIOTT DE CAYEUX  
JULIANNE CHASE  
AUSTIN RAYWOOD

**Expedition PR**

CELICOURT COMMUNICATIONS  
OH COMMUNICATIONS  
SMITHHOUSE

**Shackleton Museum, Athy, Kildare**

FRANK TAAFFE  
SEAMUS TAAFFE  
MARK McLEAN  
KEVIN KENNY

**British Film Institute**

Executive Producers for BFI  
SIMON McCALLUM  
TIM PLATT  
GILLIAN SCOTHERN

BFI National Archive Consultant  
BRYONY DIXON

Archive Access & Licensing for BFI  
JOHN CARINO

General Counsel for BFI  
RICHARD BROUSSON

**Imperial Trans-Antarctic Expedition Members, 1914-1917**

### **Weddell Sea Party**

WILLIAM BAKEWELL  
PERCE BLACKBOROW  
ALFRED CHEETHAM  
ROBERT S. CLARK  
THOMAS CREAN  
CHARLES J. GREEN  
LIONEL GREENSTREET  
ERNEST HOLNESS  
WALTER E. HOW  
HUBERT T. HUDSON  
FRANK HURLEY  
LEONARD D.A. HUSSEY  
REGINALD W. JAMES  
ALEXANDER J.H. KERR  
ALEXANDER H. MACKLIN  
GEORGE E. MARSTON  
TIMOTHY McCARTHY  
JAMES A. McILROY  
THOMAS McLEOD  
HENRY McNISH  
THOMAS ORDE-LEES  
LEWIS RICKINSON  
SIR ERNEST H. SHACKLETON  
WILLIAM STEPHENSON  
JOHN VINCENT  
FRANK WILD  
JAMES M. WORDIE  
FRANK WORSLEY

THANK YOU TO ALL THE DESCENDANTS OF THESE EPIC EXPLORERS WHO HELPED IN THE  
PRODUCTION OF THIS FILM

### **Endurance22 Expedition Team**

IN MEMORY OF JAMES-JOHN MATTHEE  
1995 – 2023

MUHAMMAD ABDEL FATTAH  
JOHN ALBERTSON  
THOMAS ANDREASSON  
LORENZO APPOLLIS  
STEFANIE ARNDT  
LUFEZO AROSI  
WAYNE AUTON  
SCOTT BARNES  
FRÉDÉRIC BASSEMAYOUSSE  
ANRIËTTE BEKKER  
HANS JAKOB BELTER  
CAPTAIN KNOWLEDGE BENGU  
SIPHESIHLE BENGU  
VIRGIL BENT  
STEPHAN BEZUIDENHOUT  
NEERESH BHOLAI  
NICK BIRTWISTLE  
JAMES BLAKE

KOBLA BLAMCUIN  
NOSISA BLAYI  
CHAD BONIN  
SÉBASTIEN BOUGANT  
MENSUN BOUND  
KEVIN BRASHER  
GRANT BROKENSHA  
JODI BROPHY  
NICHOLAS BURDEN  
CHAD BURTT  
THOMAS BUSCHE  
JEAN CHRISTOPHE "JC" CAILLEN  
SAUNDERS CARMICHAEL-BROWN  
DARIUS CARSTENS  
DEAN CEDRAS  
GRANT CLARK  
LUCY COULTER  
KEITH DAMPIES  
KURT DANIELS  
MARC DE VOS  
KOBLA DLAMINI  
LUVUYO DUBASE  
CARL ELKINGTON  
ORLANDO FEBRUARY  
EMMANUEL GUY  
ROBERT HALES  
CHAD HALSTEAD  
NATALIE HEWIT  
ESTHER HORVATH  
TIMOTHY HUGHES  
TIMOTHY JACOB  
ANDRE JHAWN-FEBRUARY  
ZAKARIA JOHNSON  
ZAAHIR KAFFOOR  
CHRISTIAN KATLEIN  
SIPHELELE KHULEKHAN NCUBE  
GREGORY KIEWIEDO  
LANCE KROUTZ  
THEMBELIHLE KUNENE  
PIERRE LE GALL  
JOSEPH LEEK  
CAPTAIN FREDERICK LIGTHELM  
ALEXANDER LIONEL  
LARS LUNDBERG  
FRANÇOIS MACÉ  
FLORENCE MAHALNGU  
CHARLES MAYESKO  
ROBERT MCGUNNIGLE  
MICHAEL MDLULI  
THULANI MNCANZA  
ADRIAN MORGAN  
GRÉGOIRE MORIZET  
JÉRÉMIE MORIZET  
PAUL MORRIS  
THAROLLO MPHAAHLELE  
DMITRII MURASHKIN  
XOLILE NGCEKWA  
MARK O'REILLY

MAEVA ONDE  
MICHAEL PATZ  
KYLE PETERSEN  
MOGAMAT PETERSEN  
REAGAN H. PAUL  
NHLANHLA PHAKATHI  
BRANDON POOLE  
SIBONILE QALANI  
LASSE RABENSTEIN  
CARLA-LOUISE RAMJUKADH  
DAVID REES JONES  
BEAT RINDERKNECHT  
JOSHUA RODWELL  
THOMAS ROSS  
ANGEY SAAISE  
CLÉMENT SCHAPMAN  
ZALAN SCHEFFERS  
JOHN SHEARS  
SIYABONGA SIBIYA  
WAYNE SMITH  
DAN SNOW  
SHAWAAL SONDAY  
FREDERIC SOUL  
BAREND STEYN  
ALEXANDRA STOCKER  
MIRA SUHRHOFF  
MICHIEL SWANEPOEL  
SIMTHEMBILE TABILE  
CHARLES TAIT  
KERWIN TAYLOR  
EDUAN TEICH  
MASIMTHEMBE TSHONGWENI  
JUKKA TUHKURI  
WALDO VENTER  
NICO VINCENT  
WARREN VOGT

**Special Thanks**

HON. ALEXANDRA SHACKLETON  
MIKLOS & MARINA VASARHELYI  
MIKLOS & MARILLA VASARHELYI  
MARINA & JAMES VASARHELYI-CHIN  
GRACE & JIMMY HARTMAN  
BRIAN & LYN JOHNSTON  
WILLIAM FEATHERSTONE  
SAUL PITALUGA  
CONRAD ANKER  
JOSLYN BARNES  
JOHN BATTSEK  
PATRICK BERGEL  
HUGO BERKELEY  
CAITLIN BRANDON  
SEB COULTHARD  
FLAVIA DE SOUZA  
KEIKO DEGUCHI  
ALAN EYRES  
LIZ GRANT

ISCA GREENFIELD-SANDERS & SEBASTIAN BLANCK

OLIVER HAARMANN  
EVAN HAYES  
MARSHALL HEYMAN  
JAMES CAIRD SOCIETY  
AGNES KOSAKOWSKI  
MATT KOSAKOWSKI  
LYNDA LAMONT  
BONNIE MACKAY  
PARHAM MOHADJER  
NILO & TEO MOHADJER  
DAVE MURRAY  
HARRY OLIVAR  
CHRISSY PANOS  
CHARLIE PARSONS  
CECILIA PECK  
HARPER DANIEL PECK  
MAGGIE PISACANE  
POLA RAPAPORT  
AMBER RICHANE  
AUGUST & THEO RICHANE  
RICK RIDGEWAY  
ELIZABETH ROLLIN  
ADELAIDE SCARDINO  
LADY EDWINA SNOW  
SARAH THOMPSON  
VIOLA TREBICKA  
ALEXANDRE VINCENT  
DANIEL VOLL  
SAM & LARA WOOLF  
PHILIPPA WORDIE  
ANNE YAO  
JOANNA YELLOWLEES-BOUND

**ARCHIVE PROVIDED BY**

A+E NETWORKS  
ALAMY  
ALEXANDER TURNBULL LIBRARY  
ART GALLERY OF NEW SOUTH WALES  
ALL3MEDIA CLIP SALES / RAW TV  
BBC MOTION GALLERY / GETTY IMAGES  
BILL DOUGLAS CINEMA MUSEUM  
BRIDGEMAN IMAGES  
FRAME WORKS INC. / NATUREFOOTAGE  
GETTY IMAGES  
ITN ARCHIVE / GETTY IMAGES  
KINOLIBRARY  
KURATOR  
LIBRARY OF CONGRESS  
LOLA CLIPS / ITV ARCHIVE  
MAKING MOVIES LTD.  
MIRRORPIX  
MITCHELL LIBRARY, STATE LIBRARY OF NEW SOUTH WALES  
NATIONAL ARCHIVES OF AUSTRALIA  
NATIONAL GEOGRAPHIC  
NOVA/GBH BOSTON  
POND5



ROYAL GEOGRAPHICAL SOCIETY  
SCOTT POLAR RESEARCH INSTITUTE, UNIVERSITY OF CAMBRIDGE  
SCREENOCEAN/CHANNEL 4/FIRST SIGHT FILMS LTD.  
SHACKLETON MUSEUM ATHY  
STATE LIBRARY VICTORIA  
WARNER BROS. DISCOVERY  
WHITE MOUNTAIN FILMS

WITH THANKS TO THE BFI NATIONAL ARCHIVE FOR THE PRESERVATION AND RESTORATION OF  
SOUTH: SIR ERNEST SHACKLETON'S GLORIOUS EPIC OF THE ANTARCTIC (1919)

#### **ADDITIONAL MATERIALS**

DIARIES, LETTERS, BOOKS, AND OTHER WRITTEN MATERIALS BY:

LIONEL GREENSTREET  
FRANK HURLEY  
LEONARD D.A. HUSSEY  
ALEXANDER H. MACKLIN  
SIR ERNEST H. SHACKLETON  
FRANK WORSLEY  
MARGERY AND JAMES FISHER

'ARGONAUTS OF THE SOUTH' / FRANK HURLEY  
'ENDURANCE: AN EPIC OF POLAR ADVENTURE' / FRANK WORSLEY  
'ENDURANCE: THE LAST SURVIVOR' / RICHARD H. GREENSTREET AND ANDREW S. GREENSTREET  
'SHACKLETON'S BOAT JOURNEY' / FRANK WORSLEY  
'SOUTH' / SIR ERNEST H. SHACKLETON  
'SOUTH WITH SHACKLETON' / LEONARD D.A. HUSSEY

9 NEWS AUSTRALIA  
ABC NEWS  
THE ARGUS  
THE BOSTON GLOBE  
THE BYSTANDER  
BRIDGEPORT EVENING FARMER  
CNBC  
THE DAILY GRAPHIC  
THE DAILY MAIL  
DAILY MAVERICK  
DAILY NEWS & LEADER  
THE EVENING STANDARD  
JYLLANDS-POSTEN SØNDAG  
THE MAGELLAN TIMES  
THE NEW YORK TIMES  
PTS WORLD NEWS  
THE SANTA FE NEW MEXICAN  
SKY NEWS  
THE SURREY COMET  
THE TATLER  
THE TIMES

#### **SONGS**

"HUMORESQUES OP. 101, B.187: NO. 7  
POCO LENTO E GRAZIOSO IN G-FLAT MAJOR"  
Written by Antonín Dvořák  
Performed by Ivo Kahánek  
Courtesy of SUPRAPHON a.s.

By arrangement with Naxos and Source/Q

“CHILDREN’S CORNER”  
Written by Claude Debussy  
Performed by Bruno Fontaine  
Courtesy of Aparté Music  
By arrangement with Source/Q

“IT’S A LONG WAY TO TIPPERARY”  
Written By Jack Judge and Harry Williams  
Performed By John McCormack  
Courtesy of Sony Classical  
By arrangement with Sony Music Entertainment

“WEARING OF THE GREEN”  
Written by Traditional  
Performed by Tommy Dempsey  
Courtesy of Smithsonian Folkways Recordings

Endurance has purchased carbon credits from projects that reduce emissions, benefit communities, and support biodiversity to compensate for production emissions.

For NATIONAL GEOGRAPHIC DOCUMENTARY FILMS

Vice President, Documentary Films	TIM HORSBURGH
Creative Executive, Documentary Films	M. ANDRÉ GARY
Manager, Documentary Films	MARJA DIAZ
Executive Vice President, Marketing & Publicity	CHRIS ALBERT
Vice President, Publicity, Documentary Films	KRISTIN MONTALBANO
Global Communications	MARCUS CAMMACK
Senior Vice President, Production Management	MICHELLE UPTON
Senior Line Producer	STEPHANIE STOLTZFUS
Senior Unit Manager	NICOLE MILOS
Senior Vice Presidents, Business Affairs	VINCENT D’AMBRA TIFFANY K. LECLERE
Principal Counsel, Legal Affairs	NICOLAS BERNASCONI
Associate Principal Counsel, Legal Affairs	AMY ARAYA
Research Manager	TERESA NEVA TATE
Technical Operations Executive	MATTHEW CONLON
Technical Operations Manager	JOSEPH SCOLA

© 2024 NGC NETWORK US, LLC  
All Rights Reserved

The reproduction, copying, publication, modification, elaboration, distribution, sale, offering for sale, hiring, rental, lending, public performance and/or exhibition, and any form of communication to the public of all or part of the program, by any means and in any form, medium or media (including the internet), whether now known or hereinafter invented, without the written permission of NGC Network US, LLC, is prohibited. Any of the aforesaid unauthorized uses of all or part of the program may result in civil, administrative, or criminal action.

For the purposes of United Kingdom copyright, NGC Network US, LLC was the owner of copyright in this program immediately after it was made.

