DUNKIRK (2017)

- Released by July 21st, 2017
- 1 hour 46 minutes
- \$150,000,000 (estimated) budget
- Christopher Nolan directed
- Syncopy, Warner Bros., Dombey Street Productions
- Rated PG-13 for intense war experience and some language

QUICK THOUGHTS:

- Demetri Panos
- Phil Svitek
- Marisa Serafini

HISTORY OF DUNKIRK

- Late May 1940, when the British Expeditionary Force, along with French, Belgian and Canadian troops were forced back to the beaches of Dunkirk. Though home was just 26 miles away, there was no easy way to reach it. The shallow-drafted beach, with its 21-foot tide, prohibited the large British naval ships from rescuing the men. But there was hope: a call had gone out for small boats to aid the effort and a flotilla of non-military "little ships" sailed out from the southern coast of England to bring the men home, codenamed Operation Dynamo.
- The film's historical consultant, Joshua Levine, author of the book Forgotten Voices of Dunkirk, emphasizes that the 1940 evacuation is far more than just a British story. "It was a massive event that still has international significance. Everything that's celebrated about World War II—in Britain, in the United States, and all around the world—would not have happened without the Dunkirk evacuation taking place. It was unbelievably important. If the British army had been killed or taken prisoner, Britain would almost certainly have surrendered, and we'd likely be living in a very different world today. To me, Dunkirk is about the preservation of freedom. Once those ships were underway, the world still had a chance."

DEVELOPMENT

- Twenty-five years prior to making the film, director Christopher Nolan came upon the idea when he and his wife Emma Thomas sailed across the English Channel to Dunkirk
- "What happened at Dunkirk is one of the greatest stories in human history, the ultimate life-or-death race against time. It was an extraordinarily suspenseful situation; that's the reality. Our aim with this movie was to throw the audience into that with an absolute respect for history, but also with a degree of intensity and, of course, a sense of entertainment, too." -Nolan
- The remarkable true story that inspired the fictional film is one that has fascinated Nolan for many years "and one I've been wanting to tell for quite some time," he says. "Like most British people, I was raised on the mythical story of the evacuation of Dunkirk, and the victory that was snatched from the jaws of defeat," he relates. "It's a massive part of our culture. It's in our bones."- Nolan
- "It was with a friend on his small sailing boat—similar to those that formed the "little ships"—that Nolan and Thomas first visited Dunkirk during the mid-1990s. The trip would give them a whole new appreciation for the seminal event they had only read about. Hampered by rough seas and bad weather, the voyage across the Channel unexpectedly took 19 hours. "It was a very arduous crossing," Nolan recalls, "and that was with nobody dropping bombs on us. What really stuck with me was just how extraordinary it was, the notion of civilians taking small boats into a war zone. They could see the smoke and the fires for many miles, so their willingness to do that and what that says about communal spirit are extraordinary."
- Nolan continues, "In looking at how to tell the story, I came fairly early on to the idea of showing events from the land, sea and air: seeing the action from the perspectives of the men on the beach, the people coming to help on the boats, and the pilots trying to protect them from above. I was immediately struck by the need to use a different time scale for each strand of the story because the guys on the beach are there for the better part of a week in the film, while the boat

crossing takes place over the course of a long day, and the action in the Spitfires involves a single hour."

WRITING (Christopher Nolan)

- Nolan kept the script for "Dunkirk" so guarded that even very few members of the crew ever laid eyes on it. Of the more than 600 people who helped bring Nolan's World War II drama to life, the 20 or so crew members on set who were allowed to read the script included the director of photography, production designer, first assistant director and property master. ""It was a lot of guessing," said "Dunkirk" art director Stéphane Cressend, who was only allowed to read the script once, six weeks *after* shooting began." "This is what's really different from all the other productions I've worked on, because you always get the script first."
- I came fairly early on to the idea of showing events from the land, sea and air: seeing the action from the perspectives of the men on the beach, the people coming to help on the boats, and the pilots trying to protect them from above. I was immediately struck by the need to use a different time scale for each strand of the story because the guys on the beach are there for the better part of a week in the film, while the boat crossing takes place over the course of a long day, and the action in the Spitfires involves a single hour. Each of those storylines—one week on land, one day at sea and one hour in the air—had different temporal characteristics, so in braiding them together editorially, I had to plot them out very carefully. Intertwining these stories leads you through the events in a very subjective way and allows you to understand the journey each of the characters is on, while always trying to suggest that there are many other unseen journeys. In an event of this magnitude, you can't possibly get a comprehensive understanding of so many individual experiences in a single film."
- The film's historical consultant, Joshua Levine, author of the book *Forgotten Voices of Dunkirk,* emphasizes that the 1940 evacuation is far more than just a British story. "It was a massive event that still has international significance. Everything that's celebrated about World War II—in Britain, in the United States, and all around the world—would not have happened without the Dunkirk evacuation taking place. It was unbelievably important. If the British army had been killed or taken prisoner, Britain would almost certainly have surrendered, and we'd likely be living in a very different world today. To me, Dunkirk is about the preservation of freedom. Once those ships were underway, the world still had a chance."
- Researching the script, Nolan read several books and firsthand accounts. He also consulted
 extensively with Levine, whom he says, "very quickly understood the tricky balance between
 entertainment and historical accuracy that we were trying to strike. He also arranged for us to
 meet with some surviving veterans of Operation Dynamo. It was a great, great honor to meet
 those people and hear about their experiences and discover what Dunkirk meant to them."

STORY/TOPICS

- Land
- Sea
- Air
- Reality/Brutality of event

CAST:

- "I wanted to cast actors who were close to the ages of the characters. We were determined to be true to the reality of how young these men would have been when they went off to fight in this terrible conflict. Some of them were just kids. We wanted fresh faces so the audience can experience these events through their eyes."- Nolan
- NOLAN REGARDING CASTING: Christopher Nolan's quest for authenticity extended to his choice of actors, especially with regard to the young men whose lives are on the line. The director expounds, "In each of the three story strands, I wanted to cast actors who were close to the ages of the characters. We were determined to be true to the reality of how young these men would have been when they went off to fight in this terrible conflict. Some of them were just kids. We wanted fresh faces so the audience can experience these events through their eyes."

FIONN WHITEHEAD (Tommy)

- "The Dunkirk spirit brings to my mind a sense of togetherness and a show of community—coming together to help out someone in trouble."
- Big-screen debut
- "Tommy is kind of your classic Average Joe soldier. He's just very young and inexperienced, and probably didn't know what he was signing up for. But he's resourceful and determined to do whatever he can to survive."
- "There were definitely days where I was pretty beaten. There was a driving rain, it was freezing, the wind was very strong, and we were all soaked through. We had our period uniforms on, which were made of wool, so they just soaked up all the water. It was so unbelievably miserable," he admits. "But then I became overwhelmed by the realness of the situation for the soldiers at the time. It was so easy to imagine when you came out onto the beach and the water was coming in and explosions were going off... That really brought it home. It was no longer just a story. I was able to empathize with the soldiers in a way I never had before. It made me realize how terrible it was for them and the real struggle they had."
- Whitehead starred in the title role of the 2016 ITV miniseries "Him."
- Earned critical acclaim for his performance in Glenn Waldron's play "Natives," presented at the Southwark Playhouse. This July, Whitehead will star in the Old Vic Theatre production of "Queers."

DAMIEN BONNARD (French Soldier)

- Damien is previously known for the films Staying Vertical (2016) and The Perfect Plan (2012).
- Alongside those, he is mostly known for his presence in many french short films.
- He was nominated this year for Most Promising Actor, in both the César Awards and Lumiere Awards in France. He took home the win in the Lumiere Awards.

MARK RYLANCE (Mr. Dawson)

- "It has a deep meaning for the English people. We were the underdogs on that beach, but we rose to the occasion and eluded the superior forces of the enemy at that time. The Dunkirk spirit has to do with that perseverance and endurance and also selflessness."
- "What drew me to the project was the history and also Chris's interesting treatment of the story in his script, which I thought was wonderful. My character is one of the many hundreds of English civilians who responded to a call to take their pleasure yachts or their little boats and sail across the Channel and get these men off the beach,"-Rylance
- He won his Oscar for his performance in Steven Spielberg's 2015 true-life drama "Bridge of Spies," for which he also won a BAFTA Award and numerous critics groups' awards for Best Supporting Actor. He also received Golden Globe and Screen Actors Guild (SAG) Award nominations for his portrayal of Russian spy Rudolf Abel in the film.

BARRY KEOGHAN (George)

- His previous credits include Konstantin Bojanov's "Light Thereafter"; Adam Smith's "Trespass Against Us," with Michael Fassbender and Brendan Gleeson; "Traders"; Martin Radich's "Norfolk"; "Stay"; and Yann Demange's award-winning "`71," opposite Jack O'Connell.
- Born and raised in Dublin, Ireland, Keoghan first gained attention for his role on the Irish television series "Love/Hate." He went on to become one of Screen International's Stars of Tomorrow in 2015, and one year later was the breakout star of the 2016 Sundance Film Festival for his performance in Rebecca Daly's "Mammal," opposite Rachel Griffiths. Most recently, the Hollywood Reporter picked Keoghan as their Cannes: Next Big Thing recipient

TOM GLYNN CARNEY (Peter)

- Feature film debut
- "Being thrown in the deep end, but Chris was everything I'd hoped he'd be and more. He was so helpful and I trusted him with every ounce of my being. It was also nice being taken under the

wing of someone like Mark. Just watching and learning from him was invaluable and worked for our relationship on camera as father and son."

- Glynn-Carney also stars in Peter Moffat's "The Last Post," for the BBC One. Set in 1965, the series also stars Jessica Raine, Ben Miles and Stephen Campbell Moore.
- Glynn-Carney trained at the Guildhall School of Music & Drama and began his career on the stage. His credits include "Peter Pan" at the Lyric Theatre Lowry, and "Macbeth" at the Royal Exchange Theatre in Manchester. While at Guildhall, he also starred in a number of in-house productions, including "Richard II," "Into the Woods," "The Apple Cart" and "Oedipus Rex."

KENNETH BRANAGH (Naval Commander Bolton)

- Had to personally return a hard copy of the screenplay to Nolan after a round of script revisions. "I had to fly to Los Angeles and hand it directly back to him," Branagh said. "I felt like I was on a spy film."
- "Bolton is the man responsible for organizing the logistics of boats and ships coming to the mole, where boats can moor, collect their soldier passengers and then move off," he says. "And there is a necessity for that to happen swiftly, with maximum efficiency, because they're being fired at. So it's a position of immense responsibility in a key area, and Bolton has to be calm under pressure while making life-or-death decisions. It just simply wasn't possible to get everyone off because the numbers were so huge. It's an appalling situation to be placed in."- Branagh

TOM HARDY (Farrier)

- "My granddad was at Dunkirk," he reveals. "He told me about it."
- "He's in a small cockpit of a plane, so his movements are very restricted, but Tom has a very big presence and can use his physicality in very interesting ways. And once again, we have much of his face covered, but the reason you can do that with Tom is because he is such an expressive actor you don't need to see all of his face. There are moments in the film where all that's visible are his eyes, and yet he can communicate and tell a story just with that."- Emma Thomas
- Hardy says he was eager to reunite with Nolan, stating, "Chris is the best at what he does. He pushes and inspires me as an actor. I'd jump on any role just to be in the company."

SYMBOLISM/TRIVIA/EASTER EGGS

- Christopher Nolan along with his wife Emma Thomas and a friend made the crossing from England to Dunkirk on a boat. The way the civilians would have done during the Dunkirk Evacuation. Nolan said it took 19 hours because of the conditions of the sea.
- This is the 3rd Christopher Nolan film to be written entirely by Chris himself, the others being Following (1998) and Inception (2010). Memento (2000) was a story based from his brother, Jonathan Nolan. The Dark Knight (2008), The Prestige (2006), The Dark Knight Rises (2012) and Interstellar (2014) were all co-written by Jonathan. Batman Begins (2005) was co-written by David S. Goyer. Christopher's only uncredited written film is Insomnia (2002).
- Christopher Nolan received a \$20 million salary against 20% of the box office gross, the biggest deal for any director since Peter Jackson received the same amount with King Kong (2005).

DIRECTING (Christopher Nolan)

- Nolan read several books and firsthand accounts. He also consulted extensively with Levine, whom he says, "very quickly understood the tricky balance between entertainment and historical accuracy that we were trying to strike. He also arranged for us to meet with some surviving veterans of Operation Dynamo. It was a great, great honor to meet those people and hear about their experiences and discover what Dunkirk meant to them."
- "Time and time again, Chris consistently manages to raise the bar. He is a true professional who doesn't leave a stone unturned or dismiss an opportunity. He's always in control and set in his volition, but he is not inflexible. That's extremely powerful for an artist. He's generous, sensitive, funny and incredibly intelligent, and I trust him—if he says he's going to do something, he will." -Hardy

PRODUCTION/CINEMATOGRAPHY (Hoyte Van Hoytema)

- Van Hoytema collaborated with director Christopher Nolan on the science fiction action adventure "Interstellar," for which he received a BAFTA Award nomination and was recognized by a number of critics organizations.
- Nolan's primary goal was to put the audience directly onto the beach, onboard the boat traversing the Channel, and in the cockpit of the Spitfires.
- FOR "Dunkirk," he expanded the use of large format— shooting the entire film with a combination of IMAX and 65mm film, something, he confirms, "I've never done before, but 'Dunkirk' is a huge story and it demanded an enormous canvas.
- Another hallmark of Nolan's films is his preference for capturing the action in-camera and eschewing digital effects and CGI as much as possible. "To me," he clarifies, "it's always very important to try and work with real things and real people. The resulting effect of that is very visceral and enveloping, and draws you into the story."
- Adding to the verisimilitude, the filmmakers, cast and crew were honored to have the opportunity
 to film a portion of "Dunkirk" on the actual beach and at the exact same time of year that the
 miraculous evacuation happened. There were some logistical challenges, including inclement
 weather, rough seas, and the construction of the mole: a narrow, kilometer-long, wood-boarded
 breakwater that poked precariously out into the cold waters of the Channel. Nevertheless,
 Thomas says it was the best possible choice. "The beach at Dunkirk is a singular place," she
 states. "We looked at other options, but it became clear that it would be difficult to replicate
 exactly the look we needed anywhere else. We all felt very lucky to be able to shoot at the
 location where the event occurred."
- Almost no one on set ever saw an image of what was being filmed, as the filmmaker had no
 monitors on set, aside from a small wireless device with an antenna that he kept for himself. "It
 looked like a radio from the 1980s," said key on-set dresser Octavio Tapia. "Normally when you're
 working on a big film like this, you have a video village with big TV's and you can see the scene."
- No photos were allowed on the "Dunkirk" set. Tapia and script supervisor Steve Gehrke were the only two people allowed to take photos, both for continuity purposes. One member of the costume department almost got fired for taking a photo of a soldier's costume for continuity, according to Tapia. "It was a really big deal," he said.
- Use of large format—shooting the entire film with a combination of IMAX and 65mm film, something, he confirms, "I've never done before, but 'Dunkirk' is a huge story and it demanded an enormous canvas. 70 percent of the movie was lensed with Imax cameras in 15-perf 65mm (65mm is the production format used for 70mm exhibition), and the rest with 5-perf 65mm using Panavision cameras.
- The team could shoot for up to two minutes on a 1,000-ft. roll before needing to reload. "We tried to handhold as much as possible for the film really to be in there, reacting. We wanted to make it as responsive as a GoPro," the cinematographer explains.
- Nolan wanted to do as much as possible in-camera, both for the sake of realism and also to
 maintain the look of the film. He explains that digital effects (created at Double Negative) were
 "scanned into the computer and then filmed out to film. But with that process, you will not sustain
 the quality of the original Imax negative." They also chose to skip the digital color grading (digital
 intermediate) process and instead do only lab color timing for the film version. For the digital
 deliverables, van Hoytema says they graded to emulate as close as possible the film version.
- Little to no CGI. "To me," he clarifies, "it's always very important to try and work with real things and real people. The resulting effect of that is very visceral and enveloping, and draws you into the story."
- BEACH:
 - Filmed a portion of "Dunkirk" on the actual beach and at the exact same time of year that the miraculous evacuation happened. During pre-production, Nolan, Thomas and production designer Nathan Crowley visited Dunkirk together. "At first, we didn't necessarily think we were going to shoot there and we did explore other possibilities," says Nolan. "But seeing the reality of the place and the unique quality of its geography

made it inevitable that we would film there, whatever the challenges might be. So we just dove in."

- Prior to filming, they swept the area for any unexploded ordinance that might have remained long-buried in the sand. Executive producer Jake Myers shares, "We knew our special effects team would be setting off controlled explosions there, so we had to do careful surveys and check for anything, even a stray bullet. Fortunately," he smiles, "nothing showed up."
- With the cast and thousands of extras on the beach, Fisher and his special effects team had to carefully plan the explosions resulting from the bombing runs on the trapped soldiers. "It's a sandy beach, but there were a lot of rocks and debris in it," Fisher says. "For safety, we would go out and dig holes and then set our charges in. And then we used clean, sifted sand to fill over the top so there wouldn't be any rocks flying out of there when the blasts went off."
- THE MOLE: A narrow, kilometer-long, wood-boarded breakwater.
 - "We had to rebuild the mole because it's a distinctive feature of Dunkirk," notes Thomas.
 "Thousands pushed their way onto this little sliver that juts out into the ocean and basically stood there, completely vulnerable to aerial assault."
 - Crowley's art department had it constructed with 14x14-inch timbers for its legs, using a crane barge to slowly build it out to sea. "There was about 600 feet of existing pier construction, and then we had to add about 500 feet," says the production designer. "It was a major undertaking that required the help of the city, the port authority, the port engineers, and dredging companies. And because we try to do things in camera, that also meant getting ships to agree to moor on a set structure. It was very tough to film practically."
 - One of the most impactful creative decisions made by the filmmakers was to concentrate the land-based filming at the exact place where the momentous events occurred nearly eight decades ago. During pre-production, Nolan, Thomas and production designer Nathan Crowley visited Dunkirk together. "At first, we didn't necessarily think we were going to shoot there and we did explore other possibilities," says Nolan. "But seeing the reality of the place and the unique quality of its geography made it inevitable that we would film there, whatever the challenges might be.
 - Prior to filming, they swept the area for any unexploded ordinance that might have remained long-buried in the sand. Executive producer Jake Myers shares, "We knew our special effects team would be setting off controlled explosions there, so we had to do careful surveys and check for anything, even a stray bullet. Fortunately," he smiles, "nothing showed up."
 - Yet by far the biggest task at Dunkirk was restoring what remained of the eastern mole to its 1940 form. Crowley says, "I remember standing there on the beach thinking, 'Oh God, we've got to build an entire pier.' A mole is a stone breakwater, and they had put a white, wooden structure on top of it to off-load ships back in the toll-ship era. That's what we had to replicate."
 - The production's restored mole was also vulnerable to attack, but from nature. In order to enable their mole to withstand the force of the ocean, Crowley's art department had it constructed with 14x14-inch timbers for its legs, using a crane barge to slowly build it out to sea. "There was about 600 feet of existing pier construction, and then we had to add about 500 feet," says the production designer. "It was a major undertaking that required the help of the city, the port authority, the port engineers, and dredging companies. And because we try to do things in camera, that also meant getting ships to agree to moor on a set structure. It was very tough to film practically."
 - The weather also proved challenging, to the surprise of the filmmakers who had hopes that early summer on the coast of France would be beautiful. Part of the filming schedule coincided with the anniversary dates of the actual evacuation, from May 27th to June 4th. But while the most crucial days of the real 1940 evacuation were remarkably calm, the

"Dunkirk" shoot was hit by some truly terrible weather. One storm was so bad that it caused the waves to tear strips from the production-built mole.

- Apart from the mole, Crowley's team also had to recreate an entirely different type of water access. "One thing the soldiers did at the time was build these makeshift piers out of trucks—driving them out into the water and lining them up," Crowley illustrates. "So we ended up building a truck pier, too...and learned the difficulty of building a truck pier," he deadpans.
- The tide was almost as much of an obstacle for the production as it had been for the evacuating army in 1940. Nolan confirms, "The tide—as indeed with the original events in the film—was a major factor because the swing of the tide is colossal in Dunkirk."
- With the cast and thousands of extras on the beach, Fisher and his special effects team had to carefully plan the explosions resulting from the bombing runs on the trapped soldiers. "It's a sandy beach, but there were a lot of rocks and debris in it," Fisher says. "For safety, we would go out and dig holes and then set our charges in. And then we used clean, sifted sand to fill over the top so there wouldn't be any rocks flying out of there when the blasts went off."
- Putting the cast and all the extras in uniform was a colossal task for costume designer Jeffrey Kurland and his department, beginning with extensive research. He says, "We looked through books and went on eBay and bought old magazines from the period. We also watched the old news reels and found some amazing firsthand accounts. We gathered a great deal of research and then shared it throughout the entire crew, not just in my department, because we were all in earnest about wanting to do this thing right."
- That attention to detail was not lost on the cast. Styles shares, "The first day, I put my uniform on and walked out and Chris checks me over and says, 'Your boots are laced wrong.' He explained that the British soldiers did them looped rather than criss-cross. He had researched everything about Dunkirk to the nth degree. It was just exciting to be involved in something like this, where we were all working toward the same end."
- COSTUME DESIGNER JEFFERY KURLAND: The main challenge for Kurland's team was that every item of clothing had to be made from scratch. "We didn't rent anything, because we were afraid that we would ruin too many pieces, so everything had to be created," Kurland explains. "But because we owned everything, we could do anything to it we wanted to. We milled the wool to make the uniforms, and then the nap of the fabric had to be shaved down because the tone did not match what Chris was looking for. I also wanted to make the wool a bit thinner, so we had to dampen each individual piece and then carefully take it down with a blow torch. And then we went in and aged it on top of that. It was a huge process that took a great deal of time."
- Most of the extras came from the town of Dunkirk and the surrounding area, "so not just the town itself played a part in the film, but the residents, too," says Thomas. "The mayor lent us an enormous amount of support in every way.
- WEATHER:
 - One storm was so bad that it caused the waves to tear strips from the production-built mole. "When the wind blew, the waves just hammered it," says special effects supervisor Scott Fisher. "The timbers were massive and the structure was engineered to withstand a lot of punishment, but the weather was well beyond what we anticipated. With the constant pounding of the waves, pieces started peeling off and deck boards started coming up." Thomas recalls, "We ended up on various occasions coming in in the morning and finding that bits of our mole had washed away overnight." "The sea was pretty rough," Crowley affirms. "The only plus was that every time the water peeled boards off the mole, it would always deposit them on the same bit of beach. So we knew where all our parts were, and could go and get them and put them back on. It was a constant repair job."
 - Rapidly shifting weather conditions also had implications for continuity. Cinematographer Hoyte van Hoytema notes, "The North Sea in that part of France is very overcast, with low-hanging clouds that are ever-changing. The sun can break through one moment, and

the next you're in fog. It's a very dynamic weather system. If you're looking for something that appears consistent and precise throughout every shot, you're pretty much chasing your tail. But because this story jumps between these different timelines, we were able to incorporate that constantly changing light."

- SEA:
 - Moonstone scenes were shot in the Netherlands on a shallow artificial lake called ljsselmeer. Nolan offers, "At Hoyte's suggestion, we had gone to ljsselmeer, which is non-tidal, so we could anchor sets to the bottom without having to worry about the tide coming in and out. The depth is between 12 and 14 feet and it looks like open water and rolls the way the sea does, though generally a little calmer."
 - Found a big catamaran and mounted this 26-foot-long, gyro-stabilized, telescopic crane to the front of it. It was very nimble and could turn and maneuver easily while holding the IMAX cameras, allowing them to be as close to the water level as possible. We used this platform to shoot virtually everything at sea."
 - BOATS-
 - Nathan Crowley worked with experienced marine coordinator Neil Andrea to track down dozens of surviving vessels from the period, from nine different countries. They included three minesweepers, a hospital ship and a 350-foot-long French destroyer named the Maillé-Brézé, which, because it no longer had an engine, was tugged up from Nantes, where she'd rested as a museum ship since 1991. The last provides one of the film's most striking visuals, "where the Moonstone sails alongside the big destroyer with hundreds of soldiers standing on its deck," Thomas says. "I think it's one of the moments in 'Dunkirk' that really resonates with me because it sums up the amazing nature of the story—the idea that regular people on pleasure boats managed to make a real difference for the military."
 - Production purchased a quaint 40-foot yacht, built in 1939, to serve as Mr. Dawson's Moonstone. Andrea says, "We bought the boat because that gave us the latitude to do whatever we needed to do with it, with cast, crew and IMAX cameras on it."
 - On the production's biggest day at sea—during the week they filmed the little ships' crossing—there were as many as 62 boats gathered on the English Channel.
 - Sinking Ships: "We built gimbals on Stage 16 at Warner Bros., which has one of the largest water tanks in the world. We used it for interiors of ships that required some effects with hulls buckling, and things like that. We also did some exteriors at Falls Lake at Universal Studios, where we shot the sinking of a 120,000-pound ship."
- AIR:
 - We wanted to show everything from the pilots' point of view, but still using IMAX cameras. It was a major challenge to have that huge camera in the cockpit of the Spitfire, but we were determined to do it."
 - British fighter planes for close-up shots of the actors in the cockpit. To shoot these action sequences, van Hoytema worked with the man he calls Panavision's "lens guru," Dan Sasaki, to devise a pivoting, periscope-style lens that enabled him to fit the large IMAX camera vertically into restricted cockpit spaces. With that, they could shoot the pilot's line of sight, looking through the canopy.
 - Van Hoytema also recruited aerial engineer Andy McCluskie to build a rig that allowed an IMAX camera to be safely mounted on the Yak. Nolan details, "We adapted our Yak to provide a camera platform, enabling us to take our actors up for closeups from different angles, using different camera mounts, while actually in the air. We wanted to get that feeling of really being in a dogfight."
 - During pre-production Nolan went for his own flight in a Spitfire, and urged both van Hoytema and Crowley to do so as well to truly feel the dynamics of the magnificent

planes that helped defend the men at Dunkirk. "When you go up in a Spitfire, which I was lucky enough to do," Nolan says, "you get an extraordinary degree of respect for the people who were flying those planes and enduring the conditions. I mean, it's very exciting, but it is not a comfortable machine to be in. The degree of physical stamina and concentration—in addition to the obvious courage that the pilots had to have—became a fascinating thing to portray."

- To capture the film's furiously intense aerial engagements, Nolan again pushed the envelope on what could be achieved practically, especially with large-format cameras. He remarks, "In today's era, with GoPro cameras and the like, people are getting very used to seeing extreme physical events from very interesting subjective angles. As a filmmaker, that raises the bar in terms of trying to depict planes from 1940 in a way that modern audiences can respond to. We wanted to show everything from the pilots' point of view, but still using IMAX cameras. It was a major challenge to have that huge camera in the cockpit of the Spitfire, but we were determined to do it."
- The first step was obtaining the planes. Nathan Crowley secured three Spitfires—two Mark 1s and one Mark 5—as well as a Spanish HA-1112 Buchón to double for the German ME-109s, better known as Messerschmitts. However, Nolan acknowledges, "We did take certain liberties with historical accuracy for narrative reasons. For example, our ME-109 Messerschmitts have yellow noses, when at that point, they had not yet started to paint the ME-109s like that. But it allows the audience to more easily distinguish the enemy from the Spitfires."
- In addition, stunt coordinator Tom Struthers came up with the idea of utilizing a Yak- 52, a two-seater Soviet aircraft that is similar enough to the Spitfire that Crowley's team could dress it as one of the iconic British fighter planes for close-up shots of the actors in the cockpit.
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- "The intimate physicality of that tiny cockpit... We really focused on that being one of the most important aspects of the film—putting the audience in that seat. It was an extremely difficult thing to do," says Nolan.
- Van Hoytema also recruited aerial engineer Andy McCluskie to build a rig that allowed an IMAX camera to be safely mounted on the Yak. Nolan details, "We adapted our Yak to provide a camera platform, enabling us to take our actors up for closeups from different angles, using different camera mounts, while actually in the air. We wanted to get that feeling of really being in a dogfight."
- The other camera aircraft employed during production were a helicopter and the Aerostar camera plane. Aerial director of photography Hans Bjerno points out, "The limiting factor with the helicopter is speed. It can only go at 120 miles per hour, whereas the Spitfires fly at 200 miles per hour. So, with that, you're basically an eye in the sky, watching the airplanes go through. But the Aerostar can go at the same speed."
- The first step was for visual effects supervisor Andrew Jackson to map out with Nolan how each aerial sequence would play out. "We started working quite early on," says Jackson, "laying out exactly what the planes were doing during each of the air battles using computer pre-visualization. That meant we started the film with a broad sketch of what the overall action would be."
- Using that as their guide, the pilots discussed each aerial scene with Nolan and van Hoytema before take-off. "We talked about how we saw it playing out and what we thought the shot should be," says Nolan. "Then the pilots would talk among themselves and walk a pattern, literally pretending to be airplanes. Sometimes they'd even hold their hands out like wings. At first, for an outsider looking at the process, it seemed an odd way to approach it. But you rapidly realize after doing a couple of flights with these guys

that it's an incredibly precise and smart way to make sure that everybody on the team knows exactly where they're meant to be, and at what point."

- While tremendous strides were made in capturing the aerial footage, not all the cockpit scenes with Hardy and Lowden could be achieved in flight. "There were certain shots we knew we'd have to get on a set," says Thomas, "so the art department built an amazing gimbal with a cockpit of a Spitfire on it that Chris was able to manually control himself."
- Nevertheless, the director insists, "We took the view of not using any green screens or blue screens. We wanted to shoot the scenes in a way that there was always a background of real water at an appropriate altitude, with real sky and natural lighting."
- To accomplish this, the production was given permission to place their gimbal at a U.S. Coast Guard facility on a sea cliff in Palos Verdes, California. "Having a high-altitude platform where we could film the actors 'flying' the plane gave us a base level of reality to intercut with the real air-to-air photography. In that way, we could create a consistency with the dogfight sequences," Nolan offers.

WARDROBE

- Putting the cast and all the extras in uniform was a colossal task for costume designer Jeffrey Kurland and his department, beginning with extensive research. He says, "We looked through books and went on eBay and bought old magazines from the period. We also watched the old news reels and found some amazing firsthand accounts. We gathered a great deal of research and then shared it throughout the entire crew, not just in my department, because we were all in earnest about wanting to do this thing right."
- That attention to detail was not lost on the cast. Styles shares, "The first day, I put my uniform on and walked out and Chris checks me over and says, 'Your boots are laced wrong.' He explained that the British soldiers did them looped rather than criss-cross. He had researched everything about Dunkirk to the nth degree.
- Every item of clothing had to be made from scratch. "We didn't rent anything, because we were afraid that we would ruin too many pieces, so everything had to be created," Kurland explains. "But because we owned everything, we could do anything to it we wanted to. We milled the wool to make the uniforms, and then the nap of the fabric had to be shaved down because the tone did not match what Chris was looking for. I also wanted to make the wool a bit thinner, so we had to dampen each individual piece and then carefully take it down with a blow torch. And then we went in and aged it on top of that. It was a huge process that took a great deal of time."

EDITING (Lee Smith, Debbie Berman, Dan Lebental)

 Smith earned Academy Award, BAFTA Award and Eddie Award nominations for his work on Christopher Nolan's "The Dark Knight," and a BAFTA Award nomination for his work on Nolan's "Inception." He has also collaborated with Nolan on "Interstellar, "The Dark Knight Rises," "Batman Begins" and "The Prestige."

SOUND/MUSIC (Hans Zimmer)

- "The unusual rhythm of the script needed to be amplified by the music. The score plays in the film as one long piece with a unifying and complex tonal structure. Sound effects and the varying time scales of the story are woven into the fabric of Hans's music." Nolan
- Sound designer and supervising sound editor Richard King recorded the motor of the Moonstone, as well as other ships, "and then all that was sent through to Hans Zimmer's facility," Smith explicates. "They sampled them in such a way that the engine sounds are always accelerating. Also, Hans recorded the ticking of Chris's watch, which was synthesized. In combination with the music, it all has an incredible drive to it."
- Zimmer brought in composer and orchestrator Benjamin Wallfisch who, together with Nolan and music editor Alex Gibson, "fashioned a modern reworking that grows out of the sights and sounds of the movie," the director notes. "Hans's own brass accents intensify the power of the piece. We wanted the score to echo the circumstances of the event we are honoring—a story of survival, and a triumph of a communal effort, as opposed to the heroism of any one individual.

PROMOTION

• Many people were surprised when *Dunkirk* was confirmed to own a PG-13 rating and openly discussed as to whether this would compromise some of the realism or brutality of incident. But Nolan soon countered that concern, explaining that the intensity would be there without dwelling on the more explicit details.

BOX OFFICE

- Total Lifetime Grosses (As of July 26th): \$69,512,746
- Domestic: \$69,512,746
 - + Foreign: \$56,900,000
 - = Worldwide: 126,412,746
- Domestic Summary
 - Opening Weekend: \$50,500,000
 - (#1 rank, 3,720 theaters, \$13,575 average)
 - % of Total Gross: 100.0%
- > View All Weekends
 - Widest Release: 3,720 theaters
 - In Release: 6 days / 0.9 weeks
- Christopher Nolan's Dunkirk became the first non-franchise film to top the weekend box office this summer and the first since March of this year as it delivered over \$50 million this weekend.

RECEPTION

- IMDB: 8.7
- Cinemascore: A-
- RT: 92% Tatometer, 84% Audience
- The site's critical consensus reads, "*Dunkirk* serves up emotionally satisfying spectacle, delivered by a writer-director in full command of his craft and brought to life by a gifted ensemble cast that honors the fact-based story."
- <u>Peter Bradshaw</u> of <u>The Guardian</u> awarded the film five stars out of five and called it Nolan's best film to date, saying: "Nolan surrounds his audience with chaos and horror from the outset, and amazing images and dazzlingly accomplished set pieces on a huge 70mm screen, particularly the pontoon crammed with soldiers extending into the churning sea, exposed to enemy aircraft"
- Todd McCarthy of <u>The Hollywood Reporter</u> also lauded the film, calling it "an impressionist masterpiece" and writing: "Although the film is deeply moving at unexpected moments, it's not due to any manufactured sentimentality or false heroics. Bursts of emotion here explode like depth charges, at times and for reasons that will no doubt vary from viewer to viewer. There's never a sense of Nolan unlike, say Spielberg manipulating the drama in order to play the viewer's heartstrings. Nor is there anything resembling a John Williams score to stir the emotional pot"

SEQUEL/LEGACY