

VALLEY OF THE BOOM

TV SERIES AIRS SUNDAYS AT 9/8C  
ON NATIONAL GEOGRAPHIC

# NATIONAL GEOGRAPHIC

## THE ULTIMATE CLIMB

HOW ALEX  
HONNOLD  
SCALED  
EL CAPITAN  
WITHOUT  
ROPES—  
AND LIVED  
TO TELL  
ABOUT IT

*"There is no  
adrenaline rush.  
If I get an adrenaline  
rush, it means that  
something has gone  
horribly wrong."*



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Since 2007 Alex Honnold had made “free-solo” ascents—alone, without a rope—of other daunting routes in Yosemite. But none compared to his June 2017 climb up El Capitan.

MIKEY SCHAEFER

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#### Valley of the Boom

This docudrama about the internet's early days airs Sunday nights through January 27 at 9/8c, on National Geographic.



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# FEATURES



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'WHAT GOLD MEANT TO EARLIER  
ERAS, AND PETROLEUM  
TO THE PREVIOUS CENTURY,  
LITHIUM MAY ECLIPSE  
IN THE COMING YEARS.'

At the Salar de Uyuni salt flat that conceals vast lithium deposits in Bolivia, an Aymara woman escorts two llamas back to the herd.

PHOTO: CEDRIC GERBEHAYE









# SO

HOW ALEX HONNOLD MADE  
A HISTORIC CLIMB UP  
'A FREAKING-BIG WALL'  
WITHOUT ROPES—  
AND LIVED TO TELL ABOUT IT

# FI


BY MARK SYNNOTT  
PHOTOGRAPHS BY JIMMY CHIN

# LO









Honnold peers over the edge of Taft Point, across the Yosemite Valley from the granite escarpment known as El Capitan. Each year Honnold devotes several months to climbing the park's iconic walls and boulders. "Yosemite," he says, "is my favorite place in the whole world."

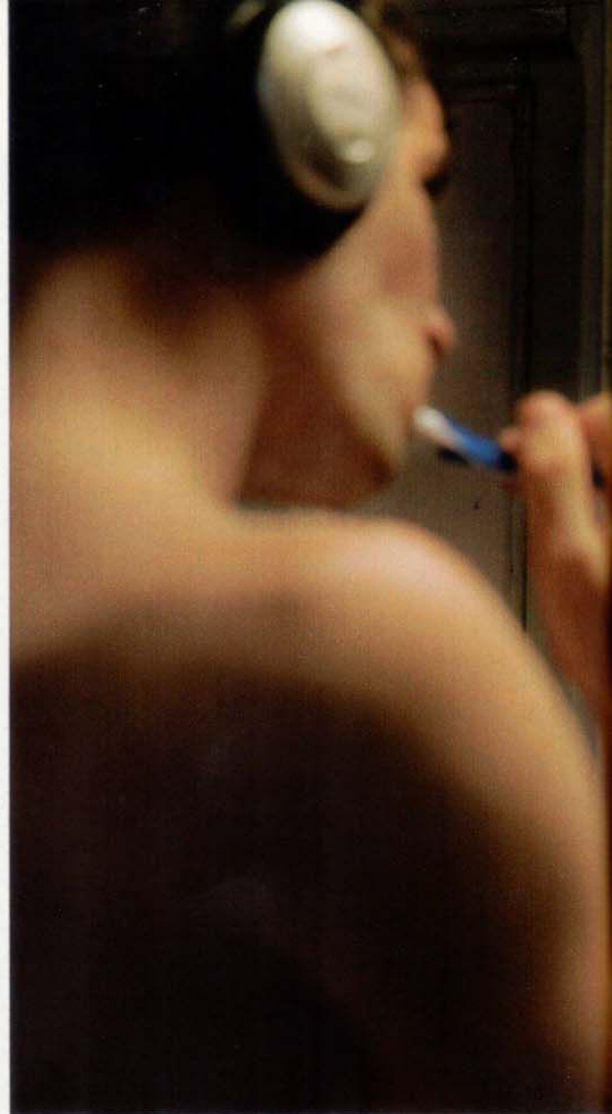


# It's 4:54 a.m. on a chilly November morning in 2016 in Yosemite National Park.

A full moon casts an eerie glow onto the southwest face of El Capitan, where Alex Honnold clings to the side of the granite wall with nothing more than the tips of his fingers and two thin edges of shoe rubber. He's attempting to do something that professional rock climbers have long thought was impossible—a “free solo” ascent of the world's most iconic cliff. That means he is alone and climbing without a rope as he inches his way up more than half a mile of sheer rock.

A light breeze rustles his hair as he shines his headlamp on the cold, smooth patch of granite where he must next place his foot. Above him, for several feet, the stone is blank, devoid of any holds. Unlike parts of the climb higher up, which feature shallow divots, pebble-size nubs, and tiny cracks that Alex can claw himself up with his freakishly strong fingers, this part—a barely less than vertical slab on a section called the Freeblast—must be mastered with a delicate balance of finesse and poise. Climbers call it friction climbing. “It's like walking up glass,” Alex once said.

He wiggles his toes. They're numb. His right ankle is stiff and swollen from a severe sprain he sustained two months earlier when he fell while practicing this part of the route. That time he was attached to a rope. Now, falling isn't an option. Free soloing isn't like other dangerous sports in which you might die if you screw up. There is no “maybe” when you're 60 stories up without a rope.



Six hundred feet below, I sit on a fallen tree watching the tiny halo of Alex's light. It hasn't moved in what feels like an eternity but is probably less than a minute. And I know why. He's facing the move that has haunted him ever since he first dreamed up this scheme seven years ago. I've climbed this slab myself, and the thought of doing it free solo makes me nauseated. The log on which I'm sitting lies less than a hundred yards from where Alex will land if he slips.

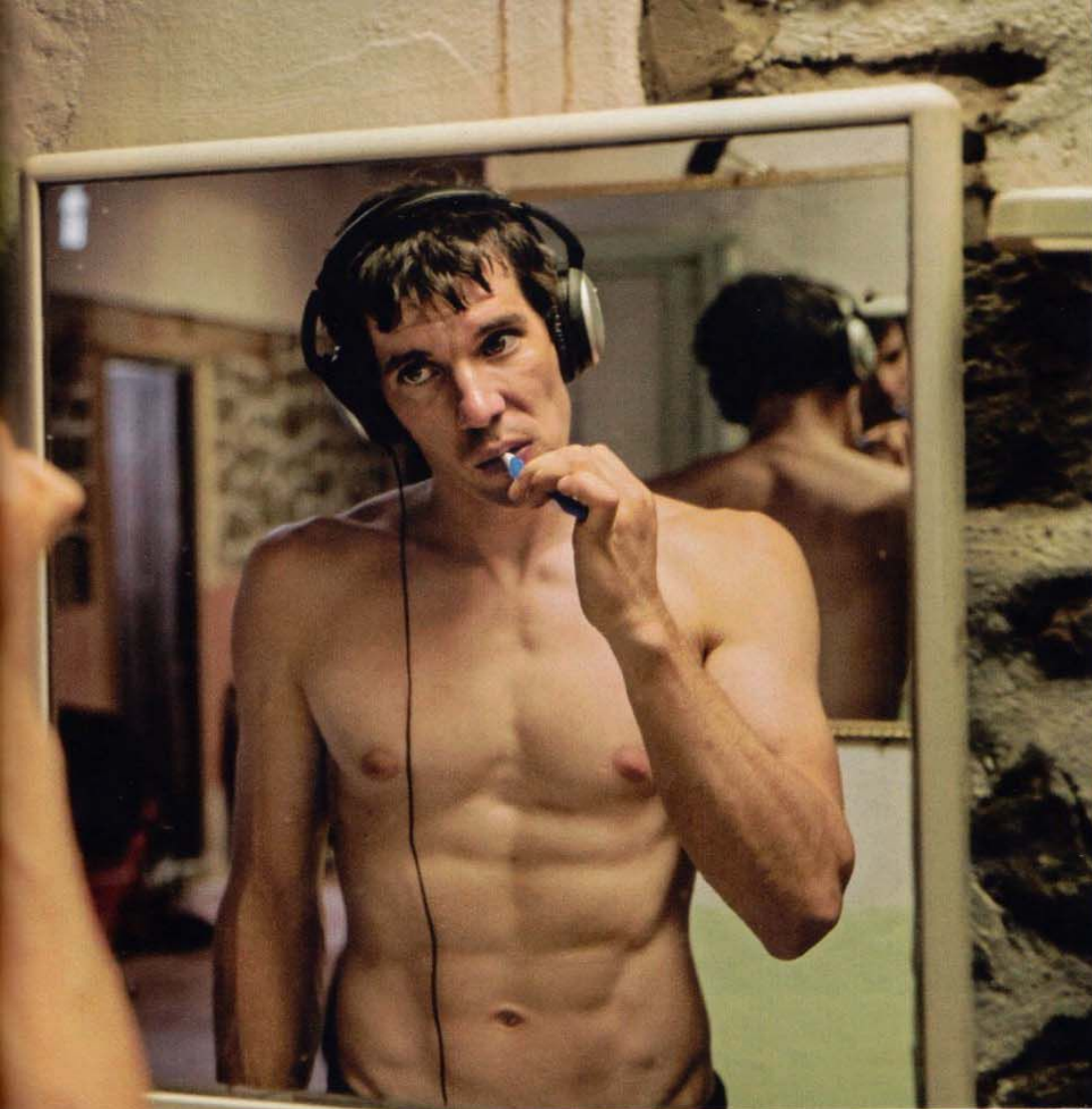
A sudden noise jolts me back to the present. My heart skips. A cameraman, part of the crew recording the feat, hustles up the trail toward the base of the wall. I can hear the static of his walkie-talkie. “Alex is bailing,” he says.

Thank God, I think. Alex will live.

I will talk to him later, but I already know why he's backing off. He's not feeling it. Of course he isn't—it's madness. Maybe, I let myself consider, this isn't meant to be.

SOME IN THE CLIMBING WORLD view free soloing as something that isn't meant to be. Critics regard it as reckless showmanship that gives





**WATCH THE FREE  
SOLO TV PREMIERE**

The critically acclaimed documentary detailing Alex Honnold's historic climb airs March 3 at 9 p.m. on National Geographic.

**LEFT**

Honnold, 33, listens to music while brushing his teeth as he prepares for a day of climbing in Morocco's High Atlas Mountains, one of several foreign locations where he trained for his attempt on El Capitan.

**BELOW**

For a free soloist, finger strength can mean the difference between life and death. Leading up to his climb, Honnold performed a 90-minute "hangboarding" routine every other day in his van, which for years has served as a home and mobile base camp.







the sport a bad name, noting the long list of those who've died attempting it. Others, myself included, recognize it as the sport's purest expression. Such was the attitude of an Austrian alpinist named Paul Preuss, considered by climbing historians to be the father of free soloing. He proclaimed that the very essence of alpinism was to master a mountain with superior physical and mental skill, not "artificial aid." By age 27, Preuss had made some 150 ropeless first ascents and was celebrated throughout Europe. Then, on October 3, 1913, while free soloing the North Ridge of the Mandlkogel in the Austrian Alps, he fell to his death.

But Preuss's ideas would live on, influencing successive generations of climbers and inspiring the "free climbing" movement of the 1960s and '70s, which espoused using ropes and other gear only as safety devices, never to assist a climber's upward progress. The next serious free soloist of note appeared in 1973, when "Hot" Henry Barber shocked the climbing community by scaling the 1,500-foot north face of Yosemite's Sentinel Rock without a rope. Three years later, John Bachar, a 19-year-old from Los Angeles, free soloed New Dimensions, an arduous 300-foot crack in Yosemite. No one upped the ante until 1987, when Peter

Attached to ropes, Honnold practices a section of Freerider, the route he would free solo up El Capitan.

Freerider tests every part of a climber's body—from fingers to toes—as well as mental and physical stamina.

Croft, an unassuming Canadian, free soloed two of Yosemite's most celebrated routes—Astroman and Rostrum—back-to-back in the same day.

Croft's achievement stood until 2007, when a shy, doe-eyed 22-year-old from Sacramento named Alex Honnold showed up in Yosemite Valley. He stunned the climbing world by repeating Croft's Astroman-Rostrum masterpiece. The next year he free soloed two famously tough routes—Zion National Park's Moonlight Buttress and the Regular Northwest Face of Yosemite's Half Dome—climbs so long and technically difficult that no serious climber had imagined they could be scaled without a rope. As sponsorship offers poured in and journalists and fans hailed his achievements, Alex was secretly contemplating a much bigger goal.

IT'S IMPORTANT TO NOTE that Alex's quest to free solo El Capitan wasn't some adrenaline-fueled stunt that he'd come up with on a whim.



## The Five Most Challenging Sections

### Enduro Corner

Honnold used a "layback" technique, pulling on the edge of a narrow crack while pushing his feet against an adjacent wall.

Length of section: 180 ft

Honnold practiced this section with ropes: >40 times

### Boulder Problem

One move on the most difficult section required him to cling to a pea-size nub while "karate kicking" one leg to reach a toehold.

Length of section: 150 ft

Practiced: >60 times

### Monster Offwidth

After wedging half his body into a vertical crack six to 12 inches wide, he wriggled his way upward.

Length of section: 200 ft

Practiced: >10 times

### Hollow Flake

He climbed down 90 feet to reach a large crack. Other climbers avoid this detour by using ropes to swing to the crack.

Length of section: 280 ft

Practiced: >10 times

### Freeblast slabs

Honnold had to smear his shoe rubber against the smooth rock and maintain perfect balance. He quit here on his first solo try.

Length of section: 200 ft

Practiced: >90 times

## No Ropes Attached

On June 3, 2017, Alex Honnold free soloed the Freerider route on El Capitan, Yosemite's 3,000-foot southwest face. He completed the route in less than four hours. It's a vertical obstacle course that can take veteran climbers using ropes several days to ascend. Honnold spent a year choreographing thousands of precise moves to get through a gantlet of physical and nerve-testing challenges.

El Capitan summit  
7,569 ft (2,307 m)

End  
elevation:  
7,173 ft

**Completes climb  
at 9:28 a.m.**  
(total: 3 hrs, 56 mins)

Level of difficulty  
of each section

Elite

Expert

Moderate

Round  
Table  
Ledge

The  
Traverse

8:55 a.m.  
**Enduro-  
Corner**

The  
Block

Honnold  
to scale

Teflon  
Corner

8:24 a.m.

**Boulder Problem**  
Honnold chooses this  
option to avoid the  
glass-slick faces along  
Teflon Corner.

El Cap-  
Spire

7:36 a.m.  
**Monster  
Offwidth**

The Ear

Instead of looping up  
around the Ear, he tra-  
verses left to avoid a  
tricky down climb.

The  
Heart

EL  
CAPITAN  
Southwest Face

While crossing this  
ledge, he wakes a  
roped climber in a  
pink unicorn suit.

6:49 a.m.  
**Hollow  
Flake**

Lung  
Ledge

Mammoth  
Terraces

Heart  
Ledges

Half  
Dollar

Triangle  
Ledge

6:04 a.m.  
**Freeblast  
slabs**

Dots mark pitches,  
which are sections  
measured by one  
rope length during a  
typical climb.

Base  
elevation:  
4,208 ft

**Starts Freerider  
route at 5:32 a.m.**

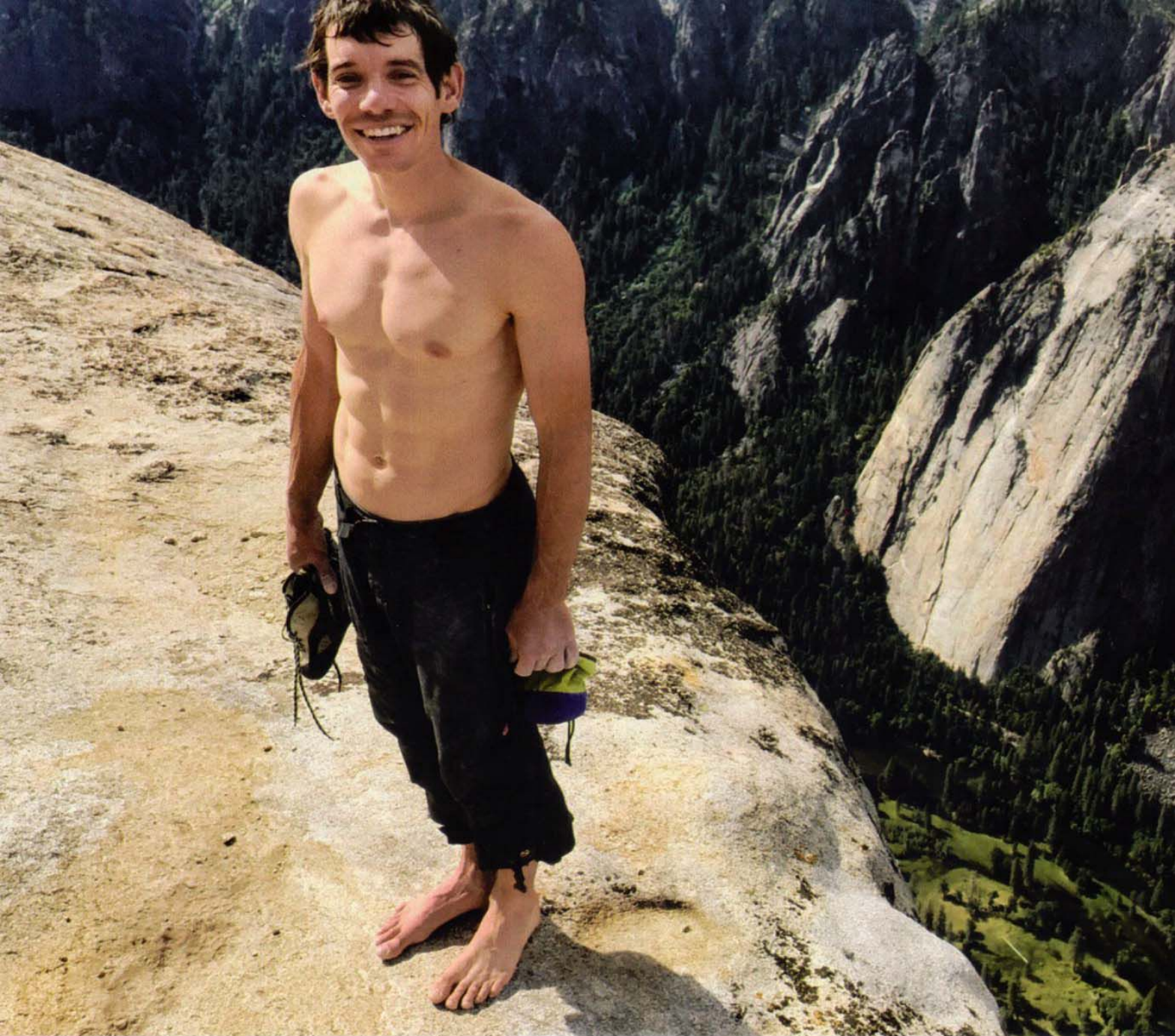


Slab  
climbing

YOSEMITE  
NATIONAL  
PARK

CALIFORNIA





In 2009, during our first climbing expedition together, he mentioned the idea to me. I thought he was totally crazy, but there was something about his supreme confidence and the way he effortlessly moved up mind-bendingly difficult rock faces that made the comment seem like more than just an idle boast.

Alex researched several El Capitan routes, finally settling on Freerider, a popular test piece for veteran climbers and one that usually requires multiple days to ascend. Its 30 or so pitches—or rope lengths—challenge a climber in practically every possible way: the strength of fingers, forearms, shoulders, calves, toes, back, and abdomen, not to mention balance, flexibility, problem solving, and emotional stamina. Certain times of the day the sun heats the rock so that it burns to

touch it; hours later the temperature can plummet below freezing. Storms blow in, powerful thermal updrafts lash the wall, springs leak out of cracks. Bees, frogs, and birds can burst from crevices during crucial moves. Rocks of all sizes can suddenly give way and tumble down.

The Freeblast may be the scariest part, but more physically demanding sections await higher up: a chimney-like crack he'll have to squirm through; a wide gap where he'll have to perform almost a full split, pressing the rock with his feet and hands to inch his way up. And then 2,300 feet above the valley floor is the route's crux—called the Boulder Problem—a blank face that requires some of the most technically challenging moves of the climb.

Over a year, Alex spent hundreds of hours on





Holding all his climbing gear—his shoes and bag of chalk—Honnold stands atop El Capitan four hours after he began scaling it. “At the bottom, I was a little nervous,” he said afterward. “I mean, it’s a freaking-big wall above you.” So what’s next? “I still want to climb hard things. Someday. You don’t just retire as soon as you get down.”

Freerider, attached to ropes, working out a precisely rehearsed choreography for each section, memorizing thousands of intricate hand and foot sequences. Afterward he’d retreat to “the box,” a RAM ProMaster van. (Vans have served as his mobile base camp and home, off and on, for the past 12 years.) There he would record each day’s training details in spiralbound notebooks.

“So how did it go up there?” I ask him one evening, as he’s preparing a vegan meal in the kitchenette of his van. He’d been rehearsing the Boulder Problem that day.

“I’ve done it 11 or 12 times now without falling,” he replies. “But it’s definitely something you have to get psyched up for.” He pantomimes the 11-move sequence for me. Later he describes it move by move in his own special argot: “Left

foot into the little thumb sprag crack thing. Right foot into this little dimple that you can toe in on pretty aggressively so it’s opposing the left hand, then you can, like, zag over across to this flat, down-pulling crimp that’s small but you can bite it pretty aggressively. I palm the wall a little bit so I can pop my foot up and then reach up to this upside-down thumb sprag crimp thing.”

“How big is that hold?” I ask.

“It’s the worst hold on the route.” Alex looks at me with his eyes open wide, holding his thumb and forefinger about an eighth of an inch apart. “It’s maybe this big.”

But before he could tackle the Boulder Problem, he’d have to get over the Freeblast, which was proving to be the most vexing variable in this life-or-death equation. I join him on one of those roped training sessions, and on the pitch where he’d stopped in November, he slips once again. By my tally, it’s the third time he has fallen here. “That move is really insecure. I don’t like it,” he tells me as we pause at a point just above slab. At that moment, I realize that Alex will never have this section mastered to his satisfaction—no matter how many times he rehearses. It’s the one move on the route that he can’t bully into submission. And he must know it too.

SATURDAY MORNING, JUNE 3, 2017, seven months after Alex’s aborted attempt, I’m in the meadow near the foot of El Capitan. The tall grass is covered with dew. The sky is gray, as it always is just before dawn. The only sound is a faint rustle of wind in the tall pine trees. I squint through a telescope, and there is Alex, 600 feet above the valley floor, moving up onto the Freeblast, the glassy slab that has tormented him for nearly a decade. His movements, normally so smooth, are worrisomely jerky. His foot tap-tap-taps against the wall as if he’s feeling his way tentatively into the slab. And then, just like that, he’s standing on a ledge several feet above the move that has been hanging over his head for years. I realize I’ve been holding my breath, so I consciously exhale. Thousands of moves are still to come, and the Boulder Problem looms far above, but he won’t be turning back this time. Alex Honnold is now well on his way to completing the greatest rock climb in history. □

**Mark Synnott** wrote about climbing sea cliffs in Oman with Alex Honnold for the January 2014 issue. Photographer **Jimmy Chin** co-directed the National Geographic documentary *Free Solo*.