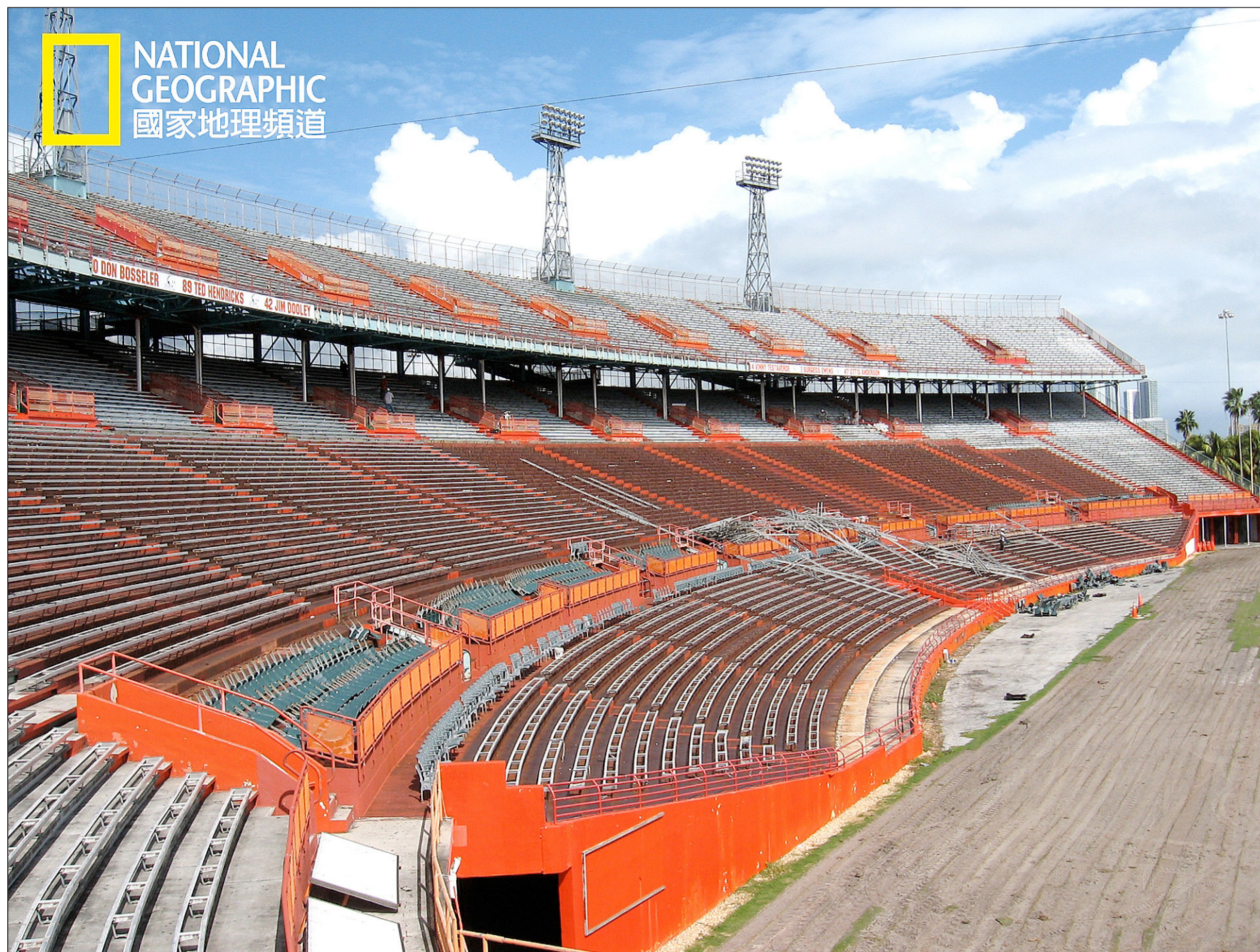


BMW PRESENTS BMW首映大賞

Megastructures — Miami Super Stadium

偉大工程巡禮—邁阿密體育場

NATIONAL GEOGRAPHIC
國家地理頻道
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Saturday, July 25 at 10:00pm
7月25日 週六 晚上10點 播出

TODAY'S WORDS 今日單字

- 1. turf** /tɜːf/ n.
草皮 (cao3 pi2)
- 2. implode** /ɪmˈplɒd/ v.
內爆 (nei4 bao4)
- 3. legendary** /ˈlɛdʒənd,ɛrɪ/ adj.
傳奇的 (chuan2 qi2 de5)
- 4. mandate** /ˈmændet/ v.
頒佈 (ban1 bu4)
- 5. rubble** /ˈrʌbl/ n.
瓦礫堆 (wa3 li4 dui1)
- 6. asbestos** /æˈsbestəs/ n.
石棉 (shi2 mian2)

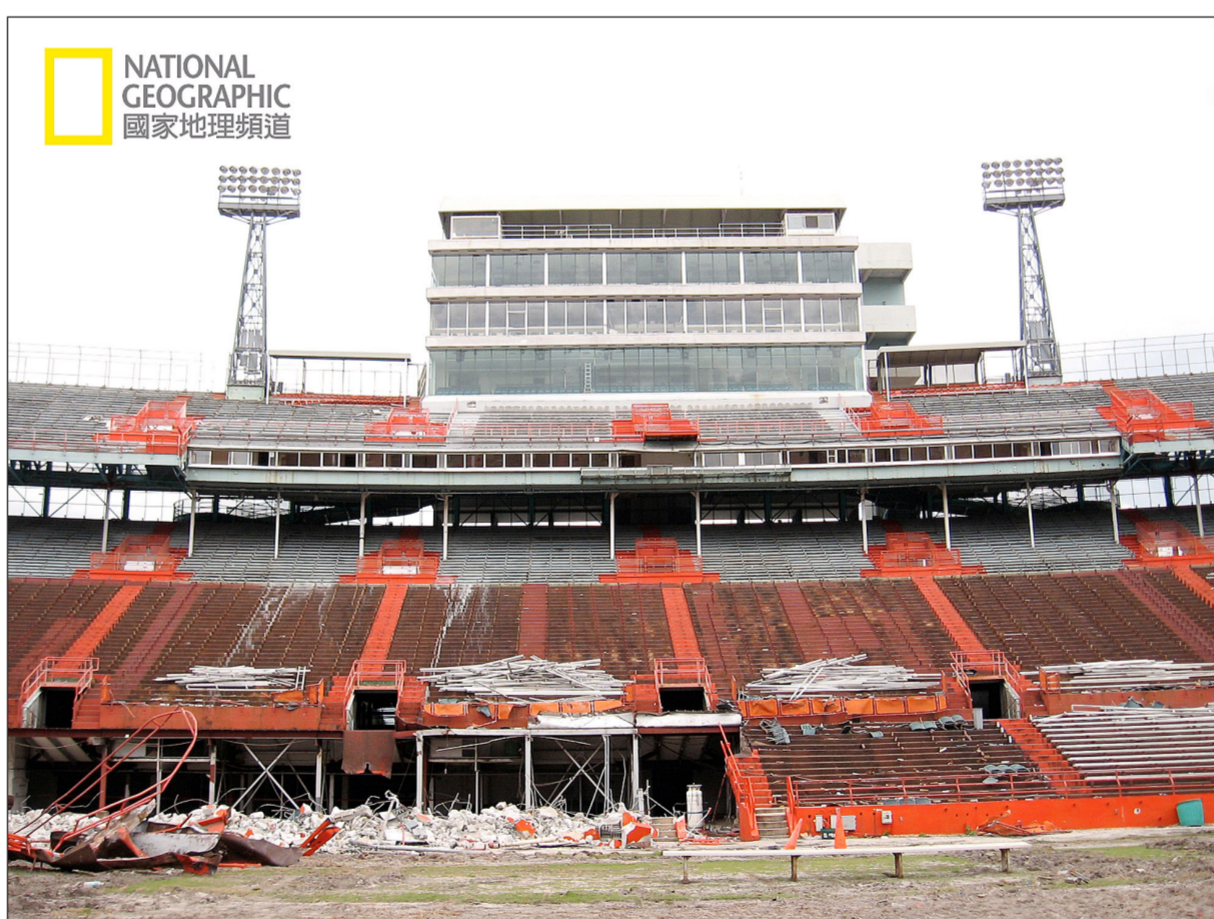
The Orange Bowl, home to Miami sports legends for over seven decades is about to be demolished. It's a monster job. Over 70,000 seats, over 9,000 square meters of **turf** and over 5,000 tons of steel. To make way for a new stadium, it's all got to go. But they must recycle 95 percent of the structure, so it can't be **imploded**.

十多年來一直是邁阿密運動明星主場的「橘子盃體育場」即將被拆毀。這是一項艱鉅的任務。為了打造新體育場，七萬多張座椅、九千多平方公尺的草皮和五千多噸的鋼材，全都要拆除一空，但百分之九十五的結構體必須回收，因此不能內爆拆除。

This 70-year-old football stadium has been home to the University of Miami Hurricanes and five Super Bowls. Now it's old and too expensive to repair. So the city of Miami has decided to lay this **legendary** stadium to rest, to clear the land for a new state-of-the-art baseball park. In just four months, a demolition team needs to remove 23,000 square meters of structure. Not only is the timetable tight, the city of Miami **mandates** that everything must be salvaged or recycled. The city chose Decommissioning and Environmental Management Company — or DEMCO — for the contract.

這座有七十年歷史的足球場是邁阿密大學颶風隊的主場，主辦過五屆超級盃球賽。現在體育場老舊，修復費用過高，邁阿密市政府便決定讓這座傳奇體育場退休，清出空地蓋一座最新型的棒球場。在短短四個月裡，拆除團隊必須拆除兩萬三千平方公尺的結構體，不只時間緊迫，邁阿密市政府還下令所有材料必須再利用或回收。市政府把工程發包給「除役與環境管理公司 (DEMCO)」。

DEMCO's Ed Hartman takes command of the site and the task ahead of him. Under Ed's watch, this super-sized demolition will unfold in three stages: Stage one: the gut-out — remove or recycle nearly 10,000 square meters of turf, over 1,000kg of lightbulbs and over 70,000 seats. They also must clear the stadium of asbestos — a potentially deadly killer if left uncontained. Stage two: the strip down — take down eight nine-tonne hurricane-grade stadium light towers while mega-machines rip, strip and prep the stadium for the third and final stage: demolition. They'll cut, pull and pummel the remaining 12-story skeleton, moving around the bowl until it's



Orange Bowl destruction.
橘子盃體育場拆除工程。

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照片由國家地理頻道提供

reduced to **rubble**. When they're done, there'll be nothing left.

DEMCO的艾德·哈特曼負責現場指揮以及未來的任務。在艾德的監督之下，這項超大拆除作業將分三階段進行：第一階段，內部清除——拆除或回收將近一萬平方公尺的草皮、一千多公斤的燈泡和七萬多張座椅。他們還得清除體育場的石棉，一旦任意棄置可能致命。第二階段，外部拆卸——拆掉八根九公噸重的颶風級體育場燈塔，用超大機具切割、剝除，準備讓體育場進入最後第三個階段，拆毀。他們會切割、拖拉和搥打十二樓高的骨架，沿著整座碗狀看臺拆除直到剩下一片瓦礫，拆除完成後，現場將空無一物。

Each material must be salvaged and sorted, including over 1,000kg of glass light bulbs. But the bulbs are delicate, so it's not a job for mallets and muscle. Each bulb needs to come out by hand, one by one. And then there's the 70,000 famous orange seats.

每樣材料都得回收利用和分類，包括一千多公斤的玻璃燈泡。但電燈泡脆弱易碎，因此不能用錘子和蠻

力硬來，每個燈泡都得徒手拆下。接著是七萬張著名的橘色座椅。

To move it all out, the demo team needs to bring heavy machinery onto the field. But they can't risk destroying the expensive Bermuda turf with the weight of their mega machines, so the sod must come out first and fast. But this isn't grass you'd find in any backyard. It's Super Bowl turf, so the city has some special plans for it. They'll transplant the turf to a local park 3km away.

為了拆除一切，拆除團隊得把重機具運到體育場，但百慕達草皮造價昂貴，他們不能冒險讓草皮被超大機具壓壞，因此得先快速拆除草皮。但這可不是普通的後院草皮，而是超級盃球場的草皮，因此市政府另有特殊安排，他們要把草皮移植到三公里外的當地公園。

Meanwhile, they take on an even bigger challenge. They still must remove the asbestos panels throughout the stadium before they can start major demolition. The workers remove



the asbestos-laden concrete, panel by panel. But removing the **asbestos** creates another danger — a patchwork of holes. The team works at over 27m in the air, and any misstep at these heights could injure or kill a worker, so a safety harness is a must. The entire project depends on this team's success. Until they clear the stadium of asbestos, DEMCO can't begin the structural demolition, and they have only months to get the site ready for the new baseball stadium.

在此同時，他們還面臨一項更大的挑戰，就是得拆掉整個體育場的石棉鑲板，才能進行重大拆除作業。工人一塊塊拆下含有石棉的混凝土鑲板，但拆除石棉帶來另一種風險，就是弄得體育場到處都是空洞。工人在離地二十七公尺高的地方施工，在這種高度稍有疏失就可能受傷或送命，因此非得繫上安全帶不可。整項工程的成敗取決於這組人成功與否，要等他們清除體育場的石棉，DEMCO才能拆除結構，他們只有幾個月的時間清理現場準備興建新棒球場。

Tune in tonight at 10:00pm to find out how the demolition team gets along on this very special assignment.

今晚十點敬請收看本節目，一同了解這項非常特別的拆除任務如何進行。