

Boeing's 737 Max software outsourced to \$9-an-hour engineers

It remains the mystery at the heart of Boeing Co.'s 737 Max crisis: how a company **renowned** for **meticulous** design made seemingly basic software mistakes leading to a pair of deadly crashes. Longtime Boeing engineers say the effort was complicated by a push to **outsource** work to lower-paid **contractors**.

renowned 有声望的; 著名的

meticulous 严谨的; 一丝不苟的

outsource 外包

contractor 承包商

The Max software — **plagued** by issues that could keep the planes grounded months longer after U.S. regulators this week revealed a new flaw — was developed at a time Boeing was **laying off** experienced engineers and pressing suppliers to cut costs.

plague 纠缠; 折磨

lay off 解雇; 休息

Increasingly, the iconic American planemaker and its **subcontractors** have relied on temporary workers making as little as \$9 an hour to develop and test software, often from countries lacking a deep background in aerospace — **notably** India.

subcontractor 转包商

notably 显著地

In offices across from Seattle's Boeing Field, recent college graduates employed by the Indian software developer HCL Technologies Ltd. occupied several rows of desks, said Mark Rabin, a former Boeing software engineer who worked in a flight-test group that supported the Max.

The coders from HCL were typically designing to **specifications** set by Boeing. Still, "it was controversial because it was far less efficient than Boeing engineers just writing the code," Rabin said. Frequently, he recalled, "it took many rounds going back and forth because the code was not done correctly."

specification 规格; 说明书