

Floating Trains: What a Way to Go

Viewed head on and from a distance, the train of the future looks like an overgrown bobsled on stilts. As it approaches its track 23 feet above the ground, it fails almost all the tests of recognition (辨识试验) : there are no engines, no rumble, and no screech. As the train hurtles by, there is only a vast whoosh, the sound of air being parted by a vehicle traveling at close to 300 miles per hour.

The new train is called a maglev, a contraction (缩写) of magnetic levitation. The vehicle lacks that litany of trainlike properties because it floats in the air, supported by the force of immensely powerful magnets. Instead of rolling on rails, it actually flies, using magnets for propulsion.

Unhindered by any friction except wind resistance, the maglev can attain speeds unheard of in ordinary land travel—the fastest conventional train. France's TGV (法国高速列车) hits only 186 miles per hour. One maglev is already running: a short, slow-moving (25 miles per hour) line in Britain that shuttles people from Birmingham's airport to the railway station.

But much faster prototypes are being tested, and ambitious projects could get under way next year, including a 230-mile link between the Los Angeles area and the gambling mecca of Las Vegas.

磁悬浮列车：走什么样的道路

从远处迎面看，这种未来列车就像是一架在高架上滑行的超大雪橇。当它从距地面 23 英尺高的轨道上驶近时，几乎使所有的辨识试验都失灵：看不到火车头，听不到隆隆声，也听不到呼啸声。当列车疾驶而过时，只听到巨大的嘶嘶声，那是列车以近 300 英里的时速行驶时，排开空气所发出的声音。

这种新列车叫做“maglev”，是磁悬浮列车（magnetic levitation）的缩写。磁悬浮列车不像火车那样枯燥，它由巨大磁铁的磁力支持着浮在空中。它不是靠轮子在轨道上行使，而是利用磁铁推进，实际上它是在飞。

除了风的阻力之外，它不受任何阻碍，所以能够达到普通陆上交通——最快的常规列车——所不能达到的速度。法国的高速列车 TGV 仅创造了每小时 186 英里的速度。有一列磁悬浮列车已经在运行。它是英国的一条短途慢速（每小时 25 英里）线路，穿梭行驶在伯明翰机场与火车站之间。

但是，速度快得多的磁悬浮列车原型正在试验中，而且，雄心勃勃的工程明年即可开工，其中包括连接洛杉矶地区和赌城拉斯维加斯的 230 英里线路。