

For anybody who is not familiar with a jet engine, a jet fan blade should be perfectly smooth.

A pilot for a Chinese carrier requested permission and landed at FRA (Frankfurt, Germany) for an unscheduled refueling stop. The reason became soon apparent to the ground crew: The Number 3 engine had been shutdown previously because of excessive vibration, and because it didn't look too good. It had apparently been no problem for the tough guys back in China: as they took some sturdy straps and wrapped them around two of the fan blades and the structures behind, thus stopping any unwanted wind-milling (engine spinning by itself due to airflow passing thru the blades during flight) and associated uncomfortable vibration caused by the suboptimal fan.



Note that the straps are seat-belts....how resourceful! After making the "repairs", off they went into the wild blue yonder with another revenue-making flight on only three engines! With the increased fuel consumption, they got a bit low on fuel, and just set it down at the closest airport (FRA) for a quick refill.

That's when the problems started: The Germans, who are kind of picky about this stuff, inspected the malfunctioning engine and immediately grounded the aircraft. (Besides these seat-belts, notice the appalling condition of the fan blades.) The airline operator had to send a chunk of money to get the first engine replaced (took about 10 days). The repair contractor decided to do some impromptu inspection work on the other engines, none of which looked all that great either. The result: a total of 3 engines were eventually changed on this plane before it was permitted to fly again.

