

Answer on Question #46937-Engineering-Other

What best describes a flight that is approaching the speed of sound?

Answer

More drag is created because the air molecules are not moving out of the way of the airplane.

Pilots engaged in high speed dives noticed several irregularities as flying speeds approached the speed of sound: aerodynamic drag increased markedly, much more than normally associated with increased speed, while lift and maneuverability decreased in a similarly unusual manner. As the planes got going, nearing the speed of sound, the air moving around the outside of the aircraft started to go faster than the speed of sound, which created shock waves as this air encountered slower moving air.