Things That Go Bump On the Flight

Phase of Flight	Noises	Sensations
Entering Aircraft	• Air conditioning • Jet engine sound from Aux. Power Unit • Whine from hydraulic pumps	None
Engine Start	• Air conditioning noise stops • Jet engine noise begins to rise in pitch	Vibration in seats near engines
Pushback	Engines starting	Rearward motion, perhaps jerky
Power Back (Aircraft backs up using reverse thrust)	Very loud engine noise	Rearward motion
Taxi	• Engine noise varies, sometimes loud • Sound of flap motors in seats near wings	• Forward motion • Possible bumps • Abrupt turns and stops
Takeoff	• Engine noise very loud which decreases as speed builds up. • Air noise begins (rushing sound), bangs from nose wheel as strut bottoms out, and as wheel goes over recessed runway lights. • Jet engine sound from Aux. Power Unit • Whine from Hydraulic pumps	• Forward motion, with a powerful acceleration if aircraft is light in weight • Bumps in runway • Bumps going over runway lights
Rotation	• Possible bang sound from nose wheel as strut extends	• Nose goes up • Seat seems to tilt back
Liftoff	• Runway bump noises stop • Air noise increases	• Possible vibration as tires spin down • Increase in deck angle
Landing Gear Retraction	• Seats over wing may experience loud bumps as gear doors open and wheels retract • Air noise may increase while gear doors are open	• Vibrations and thuds as wheels retract
Wing Flap Retraction	• Possible whining sound in wing area as flap motors actuate • Air noise increases as speed increases	• Possible slight sinking sensation as aircraft accelerates • Less vibration after flaps are retracted.
Departure Maneuvering	• No special noises • Engine noises may vary as thrust settings are changed for maneuvers	• Low altitude turns may cause tilting sensations • Pitch (deck angle) may change for level offs • If thrust is reduced, possible deceleration effect.
Enroute Climb	• As speed increases, most of the noise becomes air noise • Engines heard only in seats near them • About 5 minutes into the flight, air noise will	• Generally, enroute maneuvering is very gentle • If you are looking out the window you will see the banking for turns

	increase as aircraft reaches 10,000 feet and accelerates to full climb speed.	• Light turbulence will produce a "rough road" effect
Cruise	• Air noise	• Probably few to none • Gentle turns
Descent	• Engine thrust is reduced for people sitting next to the engines • On some aircrafts, the air condition noise changes as thrust is reduced	• Possible slight downward deck angle depending on the steepness of descent. • Gentle turns
Initial Approach	• As aircraft descends below 10,000 feet speed is reduced and air noise diminishes substantially. • If temporary level off is necessary engine noise will increase	• On some aircrafts thrust changes produce acceleration and deceleration effects. • Deck angle changes for level offs.
Flap Extension	• Air noise decreases as speed decreases • Possible whine near wings as flap motors actuate • As flaps extend, air noise becomes deeper in pitch.	• Possible lifting sensation as flaps extend • Ride, even in smooth air becomes a little rough due to flap effects on airflow
Landing Gear Extension	• Air noise increases as gear doors open • Some thuds and bangs as wheels extend, lock and doors close.	• Some bumps and thuds • Maneuvering at low speeds generally seems more intense than during cruise • Possible tilting sensation with larger bank angles
Final Approach	• Engine noise will vary as thrust is altered to maintain approach speed	• For the first time you will feel the pilot handling the aircraft by banking and changing deck angles rapidly to maintain the exact glide path.
Flare	• Engine noise will vary as thrust is altered to maintain approach speed	• Deck angle will increase as pilot reduces descent rate for touchdown
Touchdown	• Engine thrust and noise reduce abruptly • If landing is firm, possible noise of touchdown such as a loud thud	• Depending on the type of landing anything from a skipping squeak to a full scale thud • Possible sideways motion as pilot tracks runway center line • Seat seems to tilt back
Landing Rollout	• Engine noise increase rapidly as thrust is reversed • Runway noises again • Bangs and bumps	• Depending on the length of the runway either a mild or a major breaking effect • Runway bumps and bangs • Seat seems to tilt back
Taxi In	• Normal taxi noises • Engine thrust varies • One or more engines may be shut off altogether to save fuel	• Turns and stops • May be abrupt

	• Flaps retract	
Arrival at Gate	• Engines shut down • Noise decreases in pitch and stops completely • Sound of APU and air conditioning remain • Engine thrust varies • One or more engines may be shut off all together to save fuel • Flaps retract	• None after final stop