NextGEN



Federal Aviation Administration

The Next Generation Air Transportation System, or NextGen, is a transformative change in the management and operation of how we fly, which will reduce delays, save fuel and lower carbon emissions. This comprehensive initiative integrates new and existing technologies, including satellite navigation and advanced digital communications. Airports and aircraft in the US national airspace system (NAS) will be connected to NextGen's advanced infrastructure and will continually share information in realtime to improve air transportation's safety, speed, efficiency and environmental impacts. The combined initiatives that make up NextGen will provide a better travel experience.

www.faa.gov/nextgen/datacomm

DATA COMMUNICATIONS



Continuous communication between air traffic controllers and pilots is essential to safely coordinate the thousands of airplanes that are airborne in the NAS at any given time. Today, controllers and pilots communicate verbally using analog radios. There is potential for miscommunication as controllers talk to several pilots over the same frequency and instructions can be misheard or misunderstood.

Data Communications, or Data Comm, changes that by allowing controllers and pilots to communicate digitally. With the push of a button, controllers will be able to send routine instructions, such as revised departure clearances, via electronic messages directly to pilots. A message appears on the cockpit computer screen of only the aircraft to which it applies, reducing the potential for miscommunication that can lead to accidents.

Data Comm will also help aircraft to fly more direct, fuel- and time-saving routes. Because Data Comm interacts directly with an aircraft's flight computer, those complex route and altitude instructions will be quickly and correctly transmitted and accepted by the pilot.