

# 737-200 fleet analysis

**There are more than 600 737-200s in service. Analysis shows there are 200 good quality aircraft left in operation.**

Of the 1,144 737-100s/-200s built, 628 are still active. The remaining aircraft have been destroyed, parked, or taken out of service. No -100s are operational, and most of the active fleet is accounted for by -200As, with only a small portion of -200 basics still operating.

The largest original operators of the 737-200 include Air France, All Nippon Airways (ANA), Braathens, British Airways (BA), Delta Airlines, Indian Airlines, Sabena, Southwest Airlines, United Airlines USAir and VASP.

Few aircraft still operate with their original operators. Exceptions to this include Delta Airlines, Southwest Airlines, Air Algerie, Air Tanzania, Aerolineas Argentinas, Alaska Airlines, South African Airways, TAAG Angola, VASP, and aircraft operated by various air forces.

Some of these operators are now phasing the 737-200 out of operation, and the aircraft is continuing to decline. Southwest will cease operating the 737-200 in January 2005, while Ryanair has now retired most of its fleet. Delta Airlines will also phase it out.

## -200, -200F & -200C

Of the 249 -200 basics built, only 42 aircraft in passenger configuration and eight aircraft in freighter or convertible configuration are operational.

Twenty five of the -200s in service are higher gross weight aircraft, with a maximum take-off weight (MTOW) of 109,000lbs and powered by the JT8D-9A. These aircraft operate with a mixture of airlines, which include Air Philippines, Air Mediterranee of France, and Aero Continente of Peru.

VASP operates five -200s with an MTOW of 115,500lbs, while there are only another six aircraft in operation that have higher gross weight specifications than this. These were all built between 1969 and 1971. Moreover, most of these aircraft have accumulated more than 60,000 flight hours (FH) and flight cycles (FC).

Overall, the 42 passenger-configured -200s do not make good acquisition candidates.

Most of the eight -200C/-200Fs in operation are converted aircraft. These are operated by VASP, TAF Linhas Aereas, Airfast Indonesia and Falconbridge. They have also accumulated more than 60,000FC.

## -200As

Out of 865 -200As built, 526 passenger-configured aircraft and 52 freighter and Combi aircraft are still active. The -200A was in production between 1971 and 1988. The highest volumes were in 1974 and 1975, with 107 aircraft produced, and later in 1979-1984, with 515 built. Production then declined following the introduction of the 737-300.

In total, 447 aircraft were hushkitted. About 100 of these were with the Av Aero system and the remainder with the Nordam system.

A high percentage of aircraft built from 1980 onwards remains operational. Although there were five standard MTOW variants, individual aircraft have been upgraded and had their MTOWs increased since their original manufacture. The most numerous aircraft in operation are those with MTOWs of 115,500lbs, 117,000lbs and 119,500lbs. Less than 100 of the 526 passenger-configured -200As in operation have the highest MTOWs of 124,500lbs and 128,100lbs.

There are 372 passenger-configured and 22 convertible or freighter aircraft built after 1980 that are still active. These are not only the youngest in the fleet, but also have the lowest number of accumulated FCs.

More than 300 of these passenger-configured aircraft produced after 1980 have accumulated up to 50,000FCs. Typical rates of utilisation are in the region of 2,000FCs per annum. The significance of this is the ageing aircraft programme. This contains about 80 service bulletins (*see 737-200 maintenance analysis, page 14*), and the initial inspection threshold for many of these is 75,000EFC. The expense means that operators are more likely to retire the aircraft, so the most attractive acquisition candidates will be those aircraft that have

accumulated less than 50,000FC.

More than two-thirds of the passenger-configured aircraft have an MTOW of 117,000lbs or higher and 200 have been modified with a Stage 3 hushkit. About 120 of these are hushkitted with the Nordam system, and the other 90 with the Av Aero system. These 372 aircraft also have a high tankage capacity of at least 5,160USG.

Most aircraft are operated by secondary or tertiary operators. Airlines with large fleets include Aerolineas Argentinas, Aloha, VASP, Air Algerie, LAN Airlines and LAN Express, WestJet, Ryanair, Aviacsa, Canjet and European Aviation. Ryanair has now retired the majority of its fleet, and some have been acquired for parts breakage.

Many small operators of the aircraft which have also actively acquired 737-200As in recent years. These include Comair, Safair, Merpati Nusantara, Kenya Airways, Austral Airlines, Argentina, Airfast Indonesia, Southern Winds, Ryan International Airlines, Alliance Air, Bouraq Airlines, Air Philippines, Nationwide Charter, Bahamasair, Pace Airlines, Slok Air, Manadala Airlines and a host of other smaller carriers.

Several of these carriers, including Bouraq, Manadala, Merpati and Safair, which are not required to meet Stage 3 noise emissions standards, have followed a policy of acquiring aircraft without Stage 3 hushkits; as these are cheaper to acquire.

The 200 Stage 3 hushkitted aircraft manufactured from 1980 onwards that have MTOWs of at least 115,500lbs, fuel capacities of 5,160USG and have accumulated less than 50,000FC are the best candidates for possible acquisition. Many of these are operated in large fleets. Delta Airlines, which will begin phasing out its 737-200s over the next year, operates a fleet of 48 aircraft that fit in to this category. Other large fleets out of this group of 200 include those retired or due to be retired by Ryanair and Southwest. Some of these three main fleets may represent some of the best 737-200s for acquisition, but prospective buyers should be wary of the number of FCs that aircraft have accumulated.

## -200AF & -200AC

In addition to the 526 passenger-configured -200A aircraft in operation, there are another 52 -200AF and -200AC still active. The majority of these are high gross weight aircraft, with MTOWs higher than 117,000lbs. A large number, however, were built prior to 1980, and have accumulated a high number of FCs.

Major operators include Blue Dart Aviation, Estafeta Carga Aerea, Canadian North and RPX Airlines. **AC**