



Favourable Westwind

The IAI Westwind II is an unusual yet versatile performer, writes Benn Marks

The IAI Westwind II is pretty much a one-off as far as business jets go. For an aircraft that has been in service for nearly four decades, it still manages to tick all the right boxes for passenger comfort and performance.

Made by Israel Aircraft Industries (IAI), the graceful looking Westwind II is also a bit of a head turner by virtue of its extremely low-slung fuselage, which sits only inches from the ground. The mid-size corporate jet's main undercarriage is mounted to wings that cantilever out from the rear fuselage of the aircraft just ahead of its two rear-mounted turbofan engines; while the aircraft's twin-nosewheel (also low-lying)

retracts neatly into the nose of the fuselage.

There is nothing unusual about that configuration, except that the Westwind II's wings are mounted midway up its fuselage; hence, the low slung bearing of the aircraft while on the ground. So passengers basically walk into the cabin of the aircraft - and not up airstairs into it.

Another distinctive feature of the Westwind II is its Whitcomb winglets, which are mounted atop its wing tip tanks, providing yet another element of individuality (and improved performance) for the jet.

But good looks aside, the jet is also a highly capable and versatile performer. So much so, that

besides its primary role as a corporate jet transport, it has proven its worth as a freighter and aeromedical patient transport for numerous civilian operators over the course of its long service history. A total of 90 Westwind IIs (Model Number: 1124A) were built between 1980 and 1987. The aircraft has also been used extensively by the military in roles including passenger/logistics support, VIP transportation, maritime search and rescue and as an instrument flying platform. Australian air charter specialist, Pel-Air, operates a Westwind II for both civilian/commercial and military purposes. The company's Westwind II is configured to carry eight passengers (and two flightcrew), and is based at HMAS Albatross in Nowra, New South Wales.

It is contracted to the Australian Defence Force (ADF), as well as being available for commercial charter. As Pel-Air defence flight operations manager/Westwind fleet standards manager Iain Percival explains the ADF frequently makes use of



the highly reliable and adaptable Israeli-made jet for its operations.

"We use the Westwind in a wide variety of roles, predominantly in the defence support operation today. Approximately one third of tasking is the traditional passenger transfer role, transporting small numbers of defence personnel between bases on this huge continent. "Approximately one third of tasking is in support of the Navy, doing anything from system calibration trials to simulating strike aircraft and the anti-shipping missile itself ... The remaining third is in support of the RAAF," he says.

"Outside of the defence support operation, the Westwind is available for corporate charter, medical patient transfer and freight, but the defence support tasking is the absolute priority and majority tasking," he adds.

While the mid-size IAI Westwind II is arguably considered one of the 'elder statesmen' of the broader bizjet family, and not as advanced as its modern day counterparts, the aircraft still blitzes in a number of crucial performance categories. For example, the jet can comfortably fly sectors up to 2,000nm, which is ideal for transporting ADF personnel from one base to another in the country and, on the odd occasion, to destinations within the Asia Pacific region. Percival says the Westwind II's excellent range, relatively high cruise speed and large baggage carrying capacity make it ideal for these "corporate taskings", simply by virtue of being able to fly with a respectable load of passengers and baggage to most bases in the country without a fuel stop.

"The aircraft can fly Nowra to Darwin with eight passengers and two crew, plus baggage, non-stop, and from Darwin back to Nowra nonstop, again with eight passengers. She'll get from take-off to the mid-thirties in 25 minutes, and that's perfectly respectable, there's nothing wrong with that! And she'll cruise quite happily at Mach .77 (450KTAS) along the way.

"The biggest advantage of the Westwind II is that she has two external baggage compartments, capable of carrying up to 485kg/1100lbs. That is a generous baggage allowance in anyone's books and most importantly doesn't take up space in the cabin."

The Westwind II's external baggage compartments provide 40ft³ of storage space for bulky items, while a further 9ft³ of storage space is available in the cabin. Although passengers can't stand up inside the Westwind II, its cabin is nevertheless spacious enough to accommodate eight passengers comfortably without being squeezed in like sardines, and even has a fully enclosed rear lavatory. The Westwind II's cabin is 15ft 9in long, 4ft 9in high and 4ft 8in wide; while externally, its length measures 52ft 3in, its height at 15ft 9½in, with a 44ft 9½in wingspan. The aircraft can carry a maximum of ten passengers in a high-density seating configuration, but this comes at the expense of the lavatory.

But for the eight comfortably seated ADF personnel

in a rush to get from A to B, Percival says the Westwind II can fly sectors such as Nowra to Darwin (RAAF Base Tindal) in 4h 30mins-to-5h (depending on winds), and make the return trip in "normally" less than four hours; while a return trip from Perth (RAAF Base Pearce) to Nowra can be flown in as little as 3h 45mins, non-stop. Going the other way (Nowra – Perth), however, generally requires a fuel-stop at RAAF Base Edinburgh in South Australia because of the strong westerly jetstream.

Percival adds that the aircraft has flown to destinations such as Port Moresby, Manus Island, Christmas Island, the Marshall Islands and to Wake Island via Vanuatu from various deployment bases in Australia. He says the Westwind II has an initial rate of climb of 3,500ft/min and an MTOW of 23,500lb, while its power is provided by two Honeywell TFE731-3-1G turbofan engines, each pumping out 3,700lb of thrust.

With its relatively clean aerodynamic lines and generous power, the Israeli-made jet has a maximum speed of Mach 0.8 and service ceiling of 45,000ft, which is not bad for an oldie.



"The Westwind is perfectly suited to the defence support role ... She isn't a military fast jet, so we're not talking about high-g air combat, supersonic flight or climbing 50,000ft in a few minutes, but she can still provide a representative problem to solve, and can remain on task significantly longer than fast jets, for a fraction of the operating cost, thereby maximising the training value for Defence," the Westwind fleet standards manager says.

Pel-Air has operated the type for close to two decades now. Admittedly, out of the six Pel-Air Westwind aircraft that the well-resourced company operates, one is a Westwind II with the remaining five being Westwind Is (Model Number: 1124). These earlier model company Westwinds are configured as either medical retrieval transports, that can carry two stretchers and three seats, or one stretcher and four

seats; high-density (ten passenger) seating 'troop carriers'; or seven-seater corporate transports.

The highly abridged version of the plane's development chronicles the IAI Westwind as being a development of the early 1960s US Aero Commander 1121 Jet Commander, with rights to the aircraft ultimately being purchased by IAI in the late 1960s. From there the Israeli aircraft manufacturer developed a number of derivatives, such as the 1123 Westwind, 1124 Westwind, 1124 Westwind I and ultimately, 1124A Westwind II. In all, over 440 of the early Aero Commander and later more prolific Westwind variants combined were built. The final 1124A model incorporated the aforementioned Whitcomb winglets, a modified wing and revamped interior, and offered better hot and high performance over its predecessors.

Historical events aside, Pel-Air's highly capable fleet of six Westwinds have stood the test of time and offered solid, reliable service for both civilian and military operators alike, with the high-performing Westwind II leading the charge. And despite their

vintage, Percival says both variants of the Israeli-made jet are very capable performers and, relative to some of their competitors, still 'deliver the goods'.

"There are newer jets out there, but they generally incorporate compromises that the Westwind doesn't have ... On the whole, I like the versatility of the Westwind. She is capable of 365kts IAS/M0.8 and can carry 10 passengers in comfort across Australia with a worthwhile amount of baggage."

The unassuming company defence flight operations manager adds that Pel-Air's Westwind II is merely the icing on the cake of the company's Westwind fleet, but is happy to downplay the highly versatile jet's virtues in the process.

"On the whole, we fly military passengers and they're just pleased not to be in a Hercules, KingAir, helicopter or Land Rover!" ✈