



AUCKLAND INTERNATIONAL AIRPORT

Auckland, New Zealand

Hold Baggage Screening Implementation 2004 - 2006

Pax Capacity	11 million per annum
System Throughput	4800 bags / hour
Transport Conveyors	4500 meters approx.
Baggage Make Up	12 laterals added to existing 15 laterals fed by automatic sortation loop
Hold Baggage Screening	3 multi-view EDS machines for level 1 - 3 screening
Oversize Line	1 line for screening and transport of oversize baggage
Controls	GlideControl (PLC), GlideView (SCADA) & GlideSort (SAC)

Glidepath was awarded a contract with Auckland International Airport Limited (AIAL) to supply and install a Baggage Handling System (BHS) as part of a 2 year upgrade to the airport.

The scope of mechanical supply included transport conveyors, pusher diverter sortation devices, security doors, automatic tag readers (ATRs), manual screening equipment, oversize conveyors and access catwalk to all of the suspended conveyors.

Four separate manual encode stations are located around the BHS for baggage which can not be positively identified by the ATRs. An operator at each location manually scans baggage tags and re-introduce the item back into the system for sortation.

Glidepath's GLIDESORT™ sortation and allocation control system was installed to interface with both the GLIDECONTROL™ PLC control system and with the AIAL information systems. Baggage Source Messages (BSM) containing details of each bag are received from the airport IT system. Bag tag data is time-stamped and matched with the bag data received from the AIAL IT system to establish the bag's flight and makeup destination.

This information defines which lateral the bag is to be delivered to and is passed to the PLC control system.

GLIDEVIEW™ is Glidepath's Supervisory Control and Data Acquisition (SCADA) software was installed to provide detailed monitoring and reporting on all system components including the status of the X-ray machines.

Complex error recovery systems have been written into Glidepath's software to ensure 'failsafe' operation. These systems address issues such as identification and clearance of bag jams, identification and clearance of EDS machine faults, bag queuing and queue management, deferred decisions on bags and bag tracking accuracy.

The AIAL BHS upgrade required extensive planning and scheduling to integrate the new equipment and software into the existing operational system. Glidepath worked with AIAL to reduce the installation schedule to a series of phases which were then executed using a combination of overnight installation and temporary conveyors to provide minimal disruption to the airport and airline operations.