

AD 2 AERODROMES

WSSS AD 2.1 AERODROME LOCATION INDICATOR AND NAME
WSSS - SINGAPORE/Singapore Changi International

WSSS AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA		
1	<i>ARP coordinates and site at AD</i>	012133.16N 1035921.60E (Control Tower)
2	<i>Direction and distance from (city)</i>	061°, 17.2km from City Centre (The Fullerton, Singapore)
3	<i>Elevation/Reference temperature</i>	6.68m (21.92ft) / 32.4°C
4	<i>Geoid Undulation (ARP)</i>	10.22m
5	<i>MAG VAR /Annual change</i>	31'E (2005) / negligible
6	<i>AD Administration, address, telephone, telefax, AFS</i>	
	<u>RWY 02L/20R and RWY 02C/20C</u> Civil Aviation Authority of Singapore Singapore Changi Airport P.O.Box 1, Singapore 918141 Tel: (65)65421122 or (65)64434433 AFS: WSSSYAYX	<u>RWY 02R/20L</u> Republic of Singapore Air Force Headquarters, Changi Air Base 508A, Cranwell Road Singapore 509863 Tel: (65) 65864033 (Base Operations)
7	<i>Types of traffic permitted</i>	IFR
8	<i>Remarks</i>	
	a) Not available to all non-sked civil aircraft types of 40-seater or below except in special circumstances. Aircraft larger than the above category shall not plan their arrival between 0900-1559UTC. b) Aircraft shall leave nose-in position (90 deg) with the aid of aircraft tow tractors. Reverse thrust or variable pitch propellers shall not be used. Aircraft operators shall make suitable arrangements. c) PPR for aircraft not equipped with RTF. d) A subsonic jet aircraft, unless otherwise exempted, is not permitted to operate in Singapore unless it possesses a noise certificate stating that it meets the noise standards of ICAO Annex 16, Volume 1, Chapter 3, or equivalent. The noise certificate may also take the form of a suitable statement contained in another document approved by the State of Registry of the aircraft. e) Direct transit area: Overnight transit in Singapore City, Tel: (65)65421122 or (65)64434433 f) RWY 02R/20L is solely for use by Republic of Singapore Air Force (RSAF) aircraft.	

WSSS AD 2.3 OPERATIONAL HOURS				
1	<i>Aerodrome Administration:</i>	RWY 02L/20R and RWY 02C/20C	H24	
		RWY 02R/20L	2300-1100 Sun/Mon to Thu/Fri. Prior permission required from RSAF Headquarters via Changi Operations outside these hours and on public holidays.	
2	<i>Customs and Immigration</i>	H24		
3	<i>Health and Sanitation</i>	H24		
4	<i>AIS Briefing Office</i>	H24		
		5	<i>ATS Reporting Office</i>	H24
		6	<i>MET Briefing Office</i>	H24
		7	<i>Air Traffic Services</i>	H24

WSSS AD 2.4 HANDLING SERVICES AND FACILITIES		
1	<i>Cargo Handling Facilities</i>	3 cargo terminals equipped with advanced storage stacker, material and pallet container handling systems, computerised cargo information, data and documentation systems. Forklift (10 tonnes), Aircraft Main Deck Loaders (27 tonnes), trailers (e.g. 20-40 containers) on hire from hauliers.
2	<i>Fuel / Oil Types</i>	JET A1 (for jet aircraft), Engine Oil - 2380, MJ02, 750, ET025. Lubricating Oil - Aeroshell 390, 750. Hydraulic Oil - Skydrol LD4, 500B4, 500B, Hyjet IV
3	<i>Fuelling Facilities / Capacity</i>	No limitation. H24 service.
4	<i>Hangar space for visiting aircraft</i>	By arrangement with Singapore Airlines (SIA). SIA maintenance hangar 20,000sq m of column free floor space.
5	<i>Repair facilities for visiting aircraft</i>	From SIA - Major and minor maintenance and repairs for B747, B727, B737, B757, A300, A310 and other aircraft types subject to availability of specialised equipment/spares/toolings.
6	<i>Remarks</i>	a) Marshalling Service: No pilot shall taxi an aircraft on its own into a gate/stand without the aid of a docking system or a marshaller. b) Oxygen And Related Servicing: Oxygen for all cabin and aircraft system. No CO2 recharging facilities.

WSSS AD 2.5 PASSENGER FACILITIES		
1	<i>Hotels</i>	105 dayrooms at the airport. Aprx 23,500 rooms in gazetted hotels but advisable advance booking.
2	<i>Restaurants</i>	Available in both transit and public areas. Total seating capacity 4,500
3	<i>Transportation</i>	Buses, taxis and MRT train. Car rental service is available from 0700-0030 hr daily (Terminal 1) and 0800-2300 hr daily (Terminal 2).
4	<i>Medical Facilities</i>	Avbl H24 at Airport Clinic. Ambulance. General Hospitals located at Simei (12km) and City (23km).
5	<i>Banks and Post Offices</i>	Available at airport
6	<i>Tourist Office</i>	Available at airport
7	<i>Remarks</i>	Internet address : http://www.changiairport.com.sg for airport and flight information, shops and restaurants, facilities and services, flight connections and tourist information.

WSSS AD 2.6 RESCUE AND FIRE FIGHTING SERVICES		
1	<i>AD category for fire fighting</i>	CAT 10 (No facilities for foaming of runways) CAT 7 (for RWY 02R/20L)
2	<i>Rescue equipment</i>	Adequately provided as recommended by ICAO.
3	<i>Capability for removal of disabled aircraft</i>	Four 25-ton (Type G) and two 40-ton (Type F) pneumatic elevators, two 80-ton hydraulic recovery jacks, one set of tethering eqpt and other accessory eqpt. Capable of handling all wide-bodied aircraft. Provided by SIA at Tel:(65)65416329 or (65)65427116.
4	<i>Remarks</i>	All Airport Emergency Service personnel are trained in rescue and fire-fighting as well as medical first-aid.

WSSS AD 2.7 SEASONAL AVAILABILITY - CLEARING	
There is no requirement for clearing. The aerodrome is available throughout the year.	

WSSS AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA			
1	<i>Apron surface and strength</i>	<i>RWY 02L/20R RWY 02C/20C</i>	<i>Surface:</i> Concrete <i>Strength:</i> PCN 71/R/B/W/U
		<i>RWY 02R/20L</i>	<i>Surface:</i> Asphalt (Transport Apron 358m x 132m) Concrete (Transport Apron 280m x 60m) <i>Strength:</i> PCN 45/F/B/W/U
2	<i>Taxiway width, surface and strength</i>	<i>RWY 02L/20R RWY 02C/20C</i>	<i>Width:</i> 30m (100ft) <i>Surface:</i> Bituminous Concrete <i>Strength:</i> PCN 72/F/B/W/U
		<i>RWY 02R/20L</i>	<i>Width:</i> 23m (75.5ft) 50m (164ft) E1 and E6 23m (75.5ft) E2 to E5 <i>Surface:</i> Asphalt <i>Strength:</i> PCN 45/F/B/W/T
3	<i>ACL location and elevation</i>	See WSSS AD 2-31/Chart (flip side) for coordinates and elevations of aircraft stands.	
4	<i>INS checkpoints</i>		
5	<i>Remarks</i>	NIL	

WSSS AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS	
1	<p><i>Use of aircraft stand ID signs, TWY guidelines and visual docking/parking guidance system of aircraft stands.</i></p> <p>Taxiing guidance signs at all intersections with TWY and RWY at all holding positions. Guidelines at apron. Nose-in guidance at aircraft stands. For information on RLG Visual Docking System, Safegate Aircraft Docking Guidance System, Aircraft Parking Restrictions, Procedures for Start-up and Pushback of Aircraft, Pushback Procedures for Aircraft (Diagrams), Taxiing Guidance System at Singapore Changi Airport, refer to pages WSSS AD 2-5 to WSSS AD 2-9.</p> <p>Fixed yellow lights (aircraft stand manoeuvring guidance lights: ASMGL) are provided along aircraft stands 4 to 9 lead-in markings with one fixed red light near the aircraft nose gear stopping position at the Budget Terminal apron.</p>
2	<p><i>RWY and TWY markings and LGT</i></p> <p><u>RWY 02L/02C and RWY 20C</u></p> <p>RWY LGT: refer to pages WSSS AD 2-14 and WSSS AD 2-15.</p> <p>TWY LGT: Blue LGT on TWY curved edges, selected straight TWY edge sections and apron TWY edges only. Blue TWY edge markers along selected straight TWY edge sections. Red stop bar at TWY int controllable on/off. Red stop bar LGT at TWY hldg psn entrances to RWY are controllable on/off and are supplemented with elevated RWY guard LGT at the sides. Internally/externally lighted mandatory or information TWY signboards. Yellow TWY centre line markings, supplemented by green centre line LGT with selective control along rapid exit TWY, taxi-routes to and fm main RWY and aprons.</p> <p>MARKING AIDS: THR, touchdown zone, centre line, side stripe, RWY designations, aiming point markings, TWY centre line, taxi holding positions - all taxiways, apron guide lines. For positions of aircraft nosewheel in relation to stopbar and description of the RLG visual docking guidance system -see pages WSSS AD 2-5.1 and WSSS AD 2-5.2.</p> <p><u>RWY 20R</u></p> <p>RWY LGT: refer to pages WSSS AD 2-14 and WSSS AD 2-15.</p> <p>TWY LGT: same as for RWY 02L/02C and RWY 20C.</p> <p>MARKING AIDS: Pre-threshold centre-line, transverse stripe for displaced THR, RWY designations, THR, touchdown zone, aiming point marking, RWY centre-line and stripe marking aids.</p> <p><u>RWY 02R/20L</u></p> <p>RWY LGT: refer to page WSSS AD 2-14.</p> <p>TWY LGT: Elevated and inset blue LGT on TWY edge.</p> <p>STOP BAR LGT: Controllable red stop-bar LGT at TWY accesses leading to RWY 02R/20L.</p> <p>MARKING AIDS: Pre-threshold, RWY designations, THR, touchdown zone, RWY centreline, TWY centreline, taxi holding positions and apron lead-in lines. The yellow hookwire markings on the RWY are painted in accordance with STANAG requirements.</p>
3	<p><i>Stop Bars: Stop bars where appropriate.</i></p>
4	<p><i>Remarks: Nil</i></p>