

# AVIATION ABBREVIATIONS & ACRONYMS

(selected aviation industry, manufacturer, specification, flight operations, maintenance and related acronyms)

## A

<b>AAC</b>	airline administrative communications
<b>AAL</b>	above aerodrome level
<b>AAPA</b>	Association of Asia Pacific Airlines
<b>ac</b>	alternating current / aircraft
<b>ACARS</b>	aircraft communications addressing and reporting system
<b>ACAS</b>	airborne collision avoidance system
<b>ACJ</b>	Airbus Corporate Jetliner
<b>ACMF</b>	airplane condition monitoring function
<b>ACMI</b>	aircraft crew maintenance insurance ( <i>form of lease</i> )
<b>ACMP</b>	ac-powered electric motor pump
<b>ACMS</b>	aeroplane/airplane condition monitoring system
<b>ACN</b>	aircraft classification number
<b>ACP</b>	audio control panel
<b>ACT</b>	additional centre tank
<b>ACS</b>	air conditioning system
<b>ACU</b>	air conditioning unit
<b>AD</b>	airworthiness directive
<b>ADC</b>	air data computer
<b>ADF</b>	automatic direction finding
<b>ADG</b>	air driven generator
<b>ADI</b>	attitude direction indicator
<b>ADIRS</b>	air data inertial reference system
<b>ADIRU</b>	air data inertial reference unit
<b>ADM</b>	air data module
<b>ADS</b>	air data system / automatic dependent surveillance
<b>AEA</b>	Association of European Airlines
<b>AFCS</b>	automatic flight control system
<b>AFDC</b>	autopilot flight director computer
<b>AFDF</b>	autopilot flight director function
<b>AFDS</b>	autopilot flight director system
<b>AFIS</b>	aerodrome flight information service
<b>AFM</b>	aeroplane (airplane) flight manual
<b>AFMC</b>	auxiliary fuel management computer
<b>AFN</b>	ATS facilities notification
<b>AFS</b>	automatic flight system
<b>AFTN</b>	aeronautical fixed telecommunications network
<b>AGL</b>	above ground level
<b>AIC</b>	aeronautical information circular
<b>AIDS</b>	aircraft integrated data system
<b>AIP</b>	aeronautical information publication
<b>ALSCU</b>	auxiliary level sensing control unit
<b>AMI</b>	Aircraft Maintenance Insurance ( <i>form of lease</i> )
<b>AMOC</b>	alternative method of compliance
<b>AMSL</b>	above mean sea level
<b>AMU</b>	audio management unit
<b>ANSI</b>	American National Standards Institute
<b>AOA</b>	ACARS over avionics / angle of attack
<b>AOC</b>	air operator certificate / airline operational communications / airline operational control
<b>AOG</b>	aircraft on ground
<b>AP</b>	autopilot
<b>APA</b>	aircraft purchase agreement
<b>APHIS</b>	animal & plant health inspection service ( <i>USA department of agriculture port entry</i> )
<b>APIS</b>	advance passenger information system
<b>APR</b>	automatic power reserve
<b>APS</b>	auxiliary power system
<b>APU</b>	auxiliary power unit
<b>ARINC</b>	Aeronautical Radio, Inc.
<b>ASCU</b>	anti-skid control unit
<b>ASDA</b>	accelerate stop distance available
<b>ASI</b>	air speed indicator
<b>ASK</b>	available seat kilometres
<b>ASM</b>	available seat miles
<b>ASML</b>	above mean sea level
<b>ASTM</b>	American Society of Testing and Materials
<b>ATA</b>	Air Transport Association ( <i>of America</i> )
<b>ATC</b>	air traffic control
<b>ATFM</b>	air traffic flow management
<b>ATI</b>	air transport indicator
<b>ATIMS</b>	air traffic and information management system
<b>ATN</b>	aeronautical telecommunication network

# AVIATION ABBREVIATIONS & ACRONYMS

(selected aviation industry, manufacturer, specification, flight operations, maintenance and related acronyms)

<b>ATP</b>	airline transport pilot certificate (US) / approved technical procedure
<b>ATPL</b>	airline transport pilots license
<b>ATR</b>	Avions de Transport Regional
<b>ATS</b>	air traffic services
<b>ATZ</b>	aerodrome traffic zone

## B

<b>BBJ</b>	Boeing Business Jet
<b>BC</b>	battery charger
<b>BCA</b>	Boeing Commercial Airplanes
<b>BET</b>	Boeing equivalent thrust
<b>BFE</b>	buyer-furnished equipment
<b>BFL</b>	balanced field length
<b>BGAN</b>	broadband global area network
<b>BH</b>	block hours
<b>BITE</b>	built-in test equipment
<b>BOW</b>	basic operating weight (also expressed as OWE)
<b>BPCU</b>	bus power control unit
<b>BTMS</b>	brake temperature monitoring system

## C

<b>CAA</b>	Civil Aviation Authority (e.g. of the United Kingdom)
<b>CAME</b>	continuing airworthiness management exposition
<b>CAMO</b>	continuing airworthiness management organisation
<b>CAMP</b>	computerised aircraft maintenance programme
<b>CAS</b>	crew alerting system / calibrated air speed
<b>CAT</b>	category
<b>CB</b>	circuit breaker
<b>cc</b>	cubic centimetres
<b>CCD</b>	cursor control device
<b>CCR</b>	common computing resource
<b>CCS</b>	common core system
<b>CDL</b>	configuration deviation list
<b>CDN</b>	common data network
<b>CDSS</b>	cockpit door surveillance system
<b>CDU</b>	control display unit
<b>CFDIU</b>	centralised fault data interface unit
<b>CFDS</b>	centralised fault data system
<b>CFMI</b>	CFM International (engine joint-venture between GE and SNECMA)
<b>CFRP</b>	carbon fibre reinforced plastic
<b>CG</b>	centre of gravity
<b>CIDS</b>	cabin intercommunication data system
<b>CIS</b>	crew information system
<b>CL</b>	cabin lighting
<b>CMCS</b>	central maintenance computing system
<b>CMS</b>	central maintenance system
<b>CMU</b>	communications management unit
<b>CMP</b>	computerised maintenance programme
<b>CofA</b>	certificate of airworthiness
<b>CofR</b>	certificate of registration
<b>CPCS</b>	cabin pressure control system
<b>CPDLC</b>	controller/pilot data link communication
<b>CPL</b>	commercial pilots licence
<b>CRJ</b>	Canadair regional jet (Bombardier)
<b>CRM</b>	crew resource management
<b>CRS</b>	certificate of release to service
<b>CRT</b>	cathode ray tube
<b>CS</b>	certification specification
<b>CSE</b>	customer-selected equipment
<b>CSM/G</b>	constant speed motor/generator
<b>CSS</b>	cabin services system
<b>CVR</b>	cockpit voice recorder
<b>CWS</b>	central warning system

## D

<b>DA</b>	decision altitude
<b>DAR</b>	(US FAA) designated airworthiness representative / digital AIDS recorder
<b>D-ATIS</b>	digital automatic terminal information service
<b>dc</b>	direct current
<b>DCA</b>	department of civil aviation
<b>DCDU</b>	datalink control and display unit
<b>DCU</b>	data concentrator unit

# AVIATION ABBREVIATIONS & ACRONYMS

(selected aviation industry, manufacturer, specification, flight operations, maintenance and related acronyms)

<b>DDG</b>	dispatch deviation guide
<b>DDRFMI</b>	digital distance and radio magnetic indicator
<b>DER</b>	(US FAA) designated engineering representative
<b>DEU</b>	decoder/encoder unit
<b>DFDR</b>	digital flight data recorder
<b>DFLD</b>	database field loadable data
<b>DGAC</b>	Direction Generale de l'Aviation Civile ( <i>France</i> )
<b>DGCA</b>	Director General of Civil Aviation ( <i>e.g. of India</i> )
<b>DH</b>	decision height
<b>DMC</b>	display management computer
<b>DME</b>	distance measuring equipment
<b>DMU</b>	data management unit
<b>DOC</b>	direct operating costs
<b>DOT</b>	(US) Department of Transportation
<b>DU</b>	display unit
<b>DWE</b>	delivered weight empty
<b>E</b>	
<b>E</b>	electric/electronic
<b>EAA</b>	European Airline Association
<b>EAS</b>	equivalent air speed
<b>EASA</b>	European Aviation Safety Agency
<b>EBAA</b>	European Business Aircraft Association
<b>EBU</b>	engine build-up unit
<b>ECA</b>	export credit agency
<b>ECAM</b>	electronic centralised aircraft monitoring
<b>ECB</b>	electronic control box
<b>ECU</b>	electronic control unit
<b>ECS</b>	environmental control system
<b>ECU</b>	electronic control unit
<b>EDP</b>	engine-driven pump
<b>EEC</b>	electronic engine control
<b>EETC</b>	enhanced equipment trust certificate
<b>EFB</b>	electronic flight bag
<b>EFIS</b>	electronic flight instrumentation system
<b>EGPWS</b>	enhanced ground proximity warning system
<b>EGT</b>	exhaust gas temperature
<b>EICAS</b>	engine indication and crew alerting system
<b>EIS</b>	entry into service / electronic instrument system
<b>EIU</b>	engine interface unit
<b>ELAC</b>	elevator and aileron computer
<b>ELT</b>	emergency locator transmitter
<b>EMP</b>	electric motor pump
<b>EOL</b>	end of lease
<b>EP</b>	external power
<b>EPR</b>	engine pressure ratio
<b>ER</b>	extended range
<b>ERG</b>	economic regulation group
<b>ERJ</b>	Embraer regional jet
<b>EROPS</b>	extended range operations
<b>ESN</b>	engine serial number
<b>ETA</b>	estimated time of arrival
<b>ETCA</b>	engine total care agreement
<b>ETD</b>	estimated time of departure
<b>ETOPS</b>	extended-range twin-engine operations
<b>EU</b>	European Union
<b>EU-ETS</b>	EU Emissions Trading Scheme
<b>EVS</b>	enhanced vision system
<b>EWD</b>	engine warning display
<b>F</b>	
<b>F/A</b>	flight attendant
<b>FAA</b>	Federal Aviation Administration ( <i>of the United States</i> )
<b>FAC</b>	flight augmentation computer
<b>FADEC</b>	full authority digital engine control
<b>FAL</b>	final assembly line
<b>FANS</b>	future air navigation system
<b>FAR</b>	Federal Aviation Regulations ( <i>of the United States FAA</i> )
<b>FBO</b>	fixed base operator
<b>FBW</b>	fly-by-wire
<b>FCAC</b>	forward cargo air-conditioning
<b>FCC</b>	flight control computer

# AVIATION ABBREVIATIONS & ACRONYMS

(selected aviation industry, manufacturer, specification, flight operations, maintenance and related acronyms)

<b>FCE</b>	flight control electronics
<b>FCU</b>	flight control unit
<b>FD</b>	flight director
<b>FDAU</b>	flight data acquisition unit
<b>FDIMU</b>	flight data interface and management unit
<b>FDIU</b>	flight data interface unit
<b>FDPS</b>	flight data processing system
<b>FDR</b>	flight data recorder
<b>FF</b>	fuel flow
<b>FC</b>	flight cycles
<b>FH</b>	flight hours
<b>FIR</b>	flight information region
<b>FIS</b>	flight information services
<b>FL</b>	flight level
<b>FLS</b>	field loadable software
<b>FLXTO</b>	flexible take-off
<b>FMCF</b>	flight management computing function
<b>FMCS</b>	flight management computing system
<b>FMGC</b>	flight management & guidance computer
<b>FMGS</b>	flight management & guidance system
<b>FMS</b>	flight management system
<b>FOCA</b>	Federal Office of Civil Aviation ( <i>of Switzerland</i> )
<b>FOI</b>	Flight Operations Inspector
<b>FOM</b>	flight operations manual
<b>FOQA</b>	flight operations quality assurance
<b>FQIS</b>	fuel quantity-indicating system
<b>FPA</b>	flight path angle
<b>FSB</b>	fasten seat belt
<b>FTE</b>	fixed trailing edge
<b>FTK</b>	freight tonne kilometres
<b>FTM</b>	freight tonne miles
<b>FTV</b>	flight test vehicle
<b>FWC</b>	flight warning computer

## G

<b>g</b>	acceleration due to Earth's gravity
<b>GA</b>	go-around / general aviation
<b>GAMA</b>	General Aviation Manufacturer's Association
<b>GCU</b>	generator control unit
<b>GE</b>	General Electric
<b>GLS</b>	GPS landing system
<b>GNSS</b>	global navigation satellite system
<b>GPCU</b>	ground power control unit
<b>GPS</b>	global positioning system
<b>GPU</b>	ground power unit
<b>GPWS</b>	ground proximity warning system
<b>G/S</b>	glideslope
<b>GSE</b>	ground support equipment
<b>GTF</b>	geared turbofan

## H

<b>HD</b>	high definition
<b>HDD</b>	head-down display
<b>HEPA</b>	high-efficiency particulate air
<b>HF</b>	high frequency
<b>HFDR</b>	high frequency data radio
<b>HGW</b>	high gross weight
<b>HMV</b>	heavy maintenance visit
<b>HP</b>	high pressure
<b>HPT</b>	high pressure turbine
<b>HSI</b>	hot section inspection
<b>HUD</b>	head-up display
<b>HUMS</b>	health & usage monitoring system

## I

<b>IAE</b>	International Aero Engines
<b>IAP</b>	instrument approach plate
<b>IAS</b>	indicated airspeed
<b>IATA</b>	International Air Transport Association
<b>IBAC</b>	International Business Aviation Council
<b>ICAO</b>	International Civil Aviation Organisation
<b>ICO</b>	interior colour offering

# AVIATION ABBREVIATIONS & ACRONYMS

(selected aviation industry, manufacturer, specification, flight operations, maintenance and related acronyms)

<b>ICS</b>	inter-communication system
<b>IDG</b>	integrated drive generator
<b>IDOC</b>	indirect operating costs
<b>IFE</b>	in-flight entertainment
<b>IFR</b>	instrument flight rules
<b>IFSD</b>	in-flight shut down
<b>IGW</b>	increased gross weight
<b>ILS</b>	instrument landing system
<b>IMC</b>	instrument meteorological conditions
<b>INOP</b>	inoperative
<b>IOSA</b>	IATA operational safety audit
<b>IP</b>	intermediate pressure
<b>IPC</b>	illustrated parts catalogue
<b>IR</b>	instrument rating
<b>IRCM</b>	infrared countermeasures
<b>IRS</b>	inertial reference system
<b>IRU</b>	inertial reference unit
<b>ISA</b>	international standard atmosphere
<b>IS-BAO</b>	international standards for business aircraft operations
<b>IS-BAH</b>	international standards for business aircraft handling
<b>ISIS</b>	integrated standby instrument system
<b>ISS</b>	integrated surveillance system
<b>J</b>	
<b>JAA</b>	Joint Aviation Authorities (of Europe) (replaced by EU/EASA)
<b>JAR</b>	Joint Aviation Regulations (of JAA) (replaced by EU/EASA)
<b>JCAB</b>	Japanese Civil Aviation Bureau
<b>JOL</b>	Japanese operating lease
<b>K</b>	
<b>KCAS</b>	knots calibrated airspeed
<b>Kg</b>	kilogram(s)
<b>KIAS</b>	knots indicated airspeed
<b>km</b>	kilometr(s)
<b>kt / knots</b>	nautical miles per hour
<b>KTAS</b>	knots true airspeed
<b>L</b>	
<b>LA</b>	linear accelerometer
<b>lb</b>	pound weight
<b>LCC</b>	low cost carrier
<b>LCD</b>	liquid crystal display
<b>LDA</b>	landing distance available
<b>LED</b>	light-emitting diode
<b>LLP</b>	life limited parts
<b>LN</b>	line number
<b>LOI</b>	letter of intent
<b>LOPA</b>	Layout - Passenger Accommodation
<b>LP</b>	low pressure
<b>LPC</b>	licence proficiency check
<b>LPT</b>	low pressure turbine
<b>LPV</b>	localizer performance with vertical guidance
<b>LR</b>	long range
<b>LRC</b>	long range cruise
<b>LRNS</b>	long range navigation system
<b>LRU</b>	line-replaceable unit
<b>LUMP</b>	low utilisation maintenance programme
<b>M</b>	
<b>m</b>	meter(s)
<b>M</b>	Mach number
<b>MAC</b>	mean aerodynamic chord
<b>MC</b>	monitor and control
<b>MCAI</b>	mandatory continuing airworthiness information
<b>MCDU</b>	multipurpose control & display unit
<b>MCF</b>	monitor and control function
<b>MCM</b>	maintenance control manual
<b>MCPH</b>	maintenance cost per hour (GE engine support agreement)
<b>MCT</b>	maximum continuous thrust
<b>MCU</b>	modular concept unit
<b>MDA</b>	minimum descent altitude
<b>MDC</b>	maintenance diagnostic computer

# AVIATION ABBREVIATIONS & ACRONYMS

(selected aviation industry, manufacturer, specification, flight operations, maintenance and related acronyms)

<b>MDS</b>	maintenance diagnostic system
<b>MEBA</b>	Middle East Business Aircraft Association
<b>MEL</b>	minimum equipment list
<b>METAR</b>	timed aerodrome meteorological report
<b>MEW</b>	manufacturer's empty weight
<b>MFD</b>	multifunction display
<b>MLG</b>	main landing gear
<b>MLS</b>	microwave landing system
<b>MLW</b>	maximum (design) landing weight
<b>MME</b>	maintenance management exposition
<b>MMEL</b>	master minimum equipment list
<b>MMO</b>	maximum operating speed (Mach number)
<b>MMR</b>	multi-mode receiver
<b>MNPS</b>	minimum navigation performance specifications
<b>MNT</b>	mach number technique
<b>MOE</b>	maintenance organisation exposition
<b>MPD</b>	maintenance planning document
<b>MPI</b>	major periodic inspection
<b>MRO</b>	maintenance & repair organisation
<b>MRW</b>	maximum ramp weight
<b>MS</b>	military specification
<b>MSC</b>	maximum speed cruise
<b>MSCN</b>	manufacturer's specification change notice (Airbus)
<b>MSL</b>	mean sea level
<b>MSN</b>	manufacturer's serial number
<b>MSP</b>	maintenance service programme (Honeywell)
<b>MTBF</b>	mean time between failure
<b>MTOW</b>	maximum (design) takeoff weight
<b>MTW</b>	maximum (design) taxi weight
<b>MTWA</b>	maximum (design) takeoff weight authorised
<b>MWE</b>	manufacturer's weight empty
<b>MX</b>	maintenance
<b>MZFW</b>	maximum zero fuel weight

## N

<b>N1</b>	high pressure turbine speed
<b>N2</b>	fan speed
<b>N3</b>	compressor speed
<b>NAA</b>	national aviation authority
<b>NBAA</b>	National Business Aviation Association ( <i>of America</i> )
<b>NDB</b>	non-directional beacon
<b>ND</b>	navigation display
<b>NEO</b>	new engine option (Airbus)
<b>NG</b>	new generation
<b>NLG</b>	nose landing gear
<b>NM</b>	nautical mile
<b>NOTAM</b>	notice to airmen
<b>NPRM</b>	notice of proposed rulemaking
<b>NVM</b>	non-volatile memory
<b>NWS</b>	nose wheel steering

## O

<b>OAMP</b>	operator's aeroplane maintenance programme
<b>OAT</b>	outside air temperature
<b>OBDL</b>	on-board data loader
<b>OCMF</b>	onboard configuration management function
<b>O&amp;D</b>	originating & destinating
<b>ODLF</b>	onboard data load function
<b>OEB</b>	operation engineering bulletin
<b>OEM</b>	original equipment manufacturer
<b>OEW</b>	operating empty weight (see OWE)
<b>OHMF</b>	onboard health management function
<b>OL</b>	operating lease
<b>OPC</b>	operator proficiency check
<b>OTAC</b>	UK Overseas Territories aviation circular
<b>OTARs</b>	UK Overseas Territories aviation requirements
<b>OWE</b>	operating weight empty (see OEW)

## P

<b>PA</b>	purchase agreement / passenger address
<b>PAS</b>	passenger address system
<b>PAX</b>	passenger

# AVIATION ABBREVIATIONS & ACRONYMS

(selected aviation industry, manufacturer, specification, flight operations, maintenance and related acronyms)

<b>PBE</b>	protective breathing equipment
<b>PBTH</b>	power by the hour
<b>PC</b>	personal computer
<b>PCN</b>	pavement classification number
<b>PCU</b>	power control unit
<b>PDP</b>	pre-delivery payment / power distribution panel
<b>PDU</b>	power drive unit
<b>PF</b>	pilot flying
<b>PFCF</b>	primary flight control function
<b>PFD</b>	primary flight display
<b>PIC</b>	pilot in command
<b>PMA</b>	parts manufacturer approval ( <i>non OEM parts</i> )
<b>PMG</b>	permanent magnet generators
<b>PNF</b>	pilot not flying
<b>PPI</b>	pre-purchase inspection
<b>PPL</b>	private pilot's license
<b>PSEU</b>	proximity sensor electronic unit
<b>PSIU</b>	passenger service information unit
<b>PSS</b>	passenger service system
<b>PSU</b>	passenger service unit
<b>PTU</b>	power transfer unit
<b>PW</b>	Pratt & Whitney
<b>PWC</b>	Pratt & Whitney Canada
<b>PWS</b>	predictive windshear
<b>Q</b>	
<b>QA/D</b>	quick attach/detach
<b>QAR</b>	quick access recorder
<b>QEC</b>	quick engine change
<b>QFE</b>	barometric altitude at airfield elevation
<b>QNH</b>	corrected barometric altitude (relative to sea level)
<b>QRH</b>	quick reference handbook
<b>R</b>	
<b>RA</b>	radio altimeter / ACAS resolution advisory
<b>RAT</b>	ram air turbine
<b>RDC</b>	remote data concentrator
<b>RDPU</b>	remote power distribution unit
<b>RJ</b>	regional jet
<b>RMI</b>	radio magnetic indicator
<b>RMP</b>	radio management panel
<b>RNP</b>	required navigation performance
<b>RPCU</b>	residual pressure control unit
<b>RPK</b>	revenue passenger kilometres
<b>RPL</b>	repetitive flight plan
<b>RPM</b>	revenue passenger miles
<b>RR</b>	Rolls-Royce
<b>RRCC</b>	Rolls-Royce Corporate Care
<b>RTOW</b>	regulated take-off weight
<b>RTU</b>	radio tuning unit
<b>RVG</b>	residual value guarantee
<b>RVR</b>	runway visual range
<b>RVSM</b>	reduced vertical separation minima
<b>S</b>	
<b>SARP</b>	standard and recommended practices
<b>SATCOM</b>	satellite communication
<b>SB</b>	service bulletin
<b>SCN</b>	specification change notice (Airbus)
<b>SD</b>	system display
<b>SDAC</b>	system data acquisition concentrator
<b>SEC</b>	spoiler & elevator computer
<b>SELCAL</b>	selective calling system
<b>SENEL</b>	single event noise exposure level
<b>SEP</b>	safety & emergency procedures
<b>SFC</b>	specific fuel consumption
<b>SFE</b>	seller-furnished equipment
<b>SID</b>	standard instrument departure route
<b>SIL</b>	speech interference level
<b>SL</b>	sea level
<b>SLB</b>	sale & leaseback
<b>SMOH</b>	since major overhaul



# AVIATION ABBREVIATIONS & ACRONYMS

(selected aviation industry, manufacturer, specification, flight operations, maintenance and related acronyms)

<b>SMS</b>	safety management system
<b>SN</b>	serial number
<b>SOPs</b>	standard operating procedures
<b>SPL</b>	sound pressure level
<b>SPA</b>	special pro-rate agreement
<b>SRM</b>	structural repair manual
<b>SRS</b>	speed reference system
<b>SSPC</b>	solid-state power controller
<b>SSV</b>	since shop visit
<b>STAR</b>	standard terminal arrival route
<b>STC</b>	supplemental type certificate
<b>STCU</b>	standby control unit
<b>STD</b>	synthetic training device
<b>STOL</b>	short take-off & landing
<b>T</b>	
<b>TA</b>	traffic advisory
<b>TAC</b>	thrust asymmetry compensation
<b>TAF</b>	terminal aerodrome forecast
<b>TAS</b>	true air speed
<b>TAWS</b>	terrain awareness and warning system
<b>TC</b>	type certificate / Transport Canada
<b>TCA</b>	total care agreement ( <i>Rolls-Royce engine support agreement</i> )
<b>TCAS</b>	traffic alert and collision avoidance system
<b>TCSN</b>	total cycles new
<b>TCO</b>	third country operator
<b>TES</b>	total engine support
<b>TEW</b>	true empty weight
<b>TGT</b>	turbine gas temperature
<b>3GCN</b>	third-generation cabin network
<b>TMA</b>	terminal control area
<b>T/O</b>	take-off
<b>TOC</b>	top of climb
<b>TOD</b>	top of descent
<b>TODA</b>	take-off distance available
<b>TORA</b>	take-off run available
<b>TPIS</b>	tyre pressure information system
<b>TR</b>	thrust reverser / transformer rectifier
<b>TRU</b>	transformer rectifier unit
<b>TSA</b>	Transportation Security Administration ( <i>USA</i> )
<b>TSP</b>	tail strike protection
<b>TTSN</b>	total time since new
<b>U</b>	
<b>ULD</b>	unitary load device ( <i>baggage/cargo container</i> )
<b>UMS</b>	user-modifiable software
<b>U/S</b>	unserviceable
<b>USG / US gal</b>	United States Gallon
<b>USPHS</b>	United States Public Health Service
<b>UTC</b>	coordinated universal time (GMT)
<b>V</b>	
<b>V</b>	volt
<b>VDL</b>	VHF data link
<b>VDR</b>	VHF data radio
<b>VFR</b>	visual flight rules
<b>VHF</b>	very high frequency
<b>VLJ</b>	very light jet
<b>VOR</b>	VHF omni-directional range
<b>VPN</b>	virtual private network
<b>VSD</b>	vertical situation display
<b>VSI</b>	vertical speed indication
<b>VTOL</b>	vertical tak-off & landing
<b>V Speeds</b>	
<b>V1</b>	take-off decision speed
<b>V2</b>	take-off safety speed
<b>VLE</b>	maximum speed for extended landing gear
<b>VLO</b>	maximum speed for landing gear operation
<b>VMO</b>	maximum operating airspeed
<b>VNE</b>	never exceed airspeed
<b>Vr</b>	rotation speed



# AVIATION ABBREVIATIONS & ACRONYMS

*(selected aviation industry, manufacturer, specification, flight operations, maintenance and related acronyms)*

**Vref** approach airspeed

## W

**W** watt / winglet-equipped  
**WAT** weight altitude temperature (limitation)  
**WFU** withdrawn from use  
**WGS** world geodetic system  
**WOW** weight on wheels  
**WPT** waypoint  
**WXR** weather radar

## X

**XP** extra performance  
**XR** extra range  
**XWB** extra-wide body (Airbus A350)

## Z

**Z** zulu time (=GMT, UTC)

E&OE.