



# **Straight and Level**

## **Practical Airline Economics**

**Third Edition**

**Stephen Holloway**

ASHGATE e-BOOK

## STRAIGHT AND LEVEL

*For Captain David Holloway and  
in memory of Squadron Leader Richard Holloway*

# Straight and Level

Practical Airline Economics

Third Edition

STEPHEN HOLLOWAY

ASHGATE

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# List of Abbreviations and Definitions

ABC	Activity-based costing.
ACARE	Advisory Council for Aeronautics Research in Europe.
ACARS	Aircraft communications addressing and reporting system.
ACMI	Aircraft, crew, maintenance and insurance (a form of wet-leasing).
ACP	Alternative content provider.
AD	Airworthiness directive.
ADS-B	Automatic dependent surveillance–broadcast.
AIRE	Atlantic Interoperability Initiative to Reduce Emissions.
ALF	Achieved (or actual) load factor.
ANSP	Air navigation services provider.
AOC	Air operator’s certificate.
AOCC	Airline operations control centre.
AOG	Aircraft on the ground (i.e., unserviceable).
APEC	Asia-Pacific Economic Cooperation Forum.
APEX	Advance purchase excursion (fare).
APU	Auxiliary power unit.
APV	Acceptable perceived value.
ASA	Air services agreement.
ASEAN	Association of Southeast Asian Nations.
ASK	Available seat-kilometre: one seat flown one kilometre, whether occupied or not. A measure of output.
ASM	Available seat-mile: one seat flown one mile.
ATA	Air Transport Association of America.
ATC	Air Traffic Control.
ATK	Available tonne-kilometre: one tonne of payload capacity flown one kilometre, whether sold or not.
ATM	Available ton-mile: one ton of payload capacity flown one mile. (ATM is also a widely used abbreviation for ‘air traffic management’, but is not used as such in this book.)
ATPCO	Airline Tariff Publishing Company.
ATS	Air traffic services.
AVC	Average variable cost.
BALPA	British Air Line Pilots’ Association.
BCBP	Barcoded boarding pass.

BELF	Break-even load factor.
BFE	Buyer-furnished equipment.
BIDT	Billing information data tape.
BV	Base value.
CAA	Civil Aviation Authority (UK).
CAB	Civil Aeronautics Board (US).
CASM	Cost per available seat-mile ('unit cost').
CCQ	Cross-crew qualification.
CDA	Continuous descent approach.
CEO	Chief executive officer.
CER	Certified Emissions Reduction.
CMV	Current market value.
CNS	Communication, navigation, and surveillance.
CPA	Capacity purchase agreement.
CRS	Computer reservation system.
CUSS	Common-use self-service (kiosks).
D <sup>3</sup>	Demand-driven despatch.
DFM	Dynamic fleet management.
DOC	Direct operating cost.
DOJ	Department of Justice (US).
DOT	Department of Transportation (US).
EC	European Commission.
ECAA	European Common Aviation Area. (A single aviation market comprising members of the EEA.)
ECTM	Engine condition trend monitoring.
EDI	Electronic data interchange.
EEA	European Economic Area. (A free-trade area comprising members of the EU together with Iceland, Liechtenstein, Norway and Switzerland.)
EHM	Engine health monitoring.
ELFAA	European Low Fares Airline Association.
ERP	Enterprise resource planning.
ERU	Emission reduction unit (in the context of emissions trading).
ETOPS	Extended-range twin-engine operations.
ETS	Emissions trading scheme.
EU	European Union.
EUA	EU Emissions Allowance.
FAA	Federal Aviation Administration (US).
FAK	Freight-all-kinds (rate).
FFP	Frequent flyer programme.
FOD	Fuel over destination. (FOD is also a widely used abbreviation for 'foreign object damage', to airframes or engines, but is not used as such in this book.)
FTK	Freight tonne-kilometre.
FTM	Freight ton-mile.
GAAP	Generally accepted accounting principles.
GAO	General Accountability Office (US).
GATS	General Agreement on Trade in Services.

GDP	Gross domestic product.
GDS	Global distribution system.
GIT	Group inclusive tour.
GNE	GDS new entrant.
GNP	Gross national product.
GSA	General sales agent.
GSE	Ground support equipment.
HUD	Head-up display.
IATA	International Air Transport Association.
ICAO	International Civil Aviation Organization.
ICT	Information and communication technologies.
IFC	Inflight communications.
IFE	Inflight entertainment.
IO	Industrial organisation (economics).
IOC	Indirect operating cost.
IOSA	IATA Operational Safety Audit.
IP	Initial provisioning.
IPCC	Intergovernmental Panel on Climate Change.
IPO	Initial public offering.
IROPS	Irregular operations.
IRR	Internal rate of return.
ISAGO	IATA Safety Audit for Ground Operations.
IT	Information technology.
JIT	Just-in-time (inventory management).
JITI	Japan International Trade Institute.
JPDO	Joint Planning and Development Office.
LCC	Low-cost carrier.
LFA	Low-fare airline.
LRAC	Long-run average cost.
LRMC	Long-run marginal cost.
LROPS	Long-range operations.
LRU	Line-replaceable unit.
MAF	Minimum acceptable fare.
MALIAT	Multilateral Agreement on the Liberalisation of International Air Transportation.
MCT	Minimum connecting time.
MEL	Minimum equipment list.
MES	Minimum efficient scale.
MFF	Mixed fleet flying.
MIDT	Marketing information data tape.
MPA	Multilateral prorate agreement.
MPD	Maintenance planning document.
MPL	Multi-crew pilot licence.
MRO	Maintenance, repair, and overhaul.
MTOW	Maximum take-off weight.
NAS	National Airspace System (US).
NGATS	Next Generation (or NextGen) Air Transport System (US).
NPRM	Notice of proposed rule-making (US).