

AE3-295-1 Exams

January 2007

1)

a) What are the legal tasks of ATC The Netherlands?

- air traffic control
- flight information service
- alerting service

b) The controlled airspace can be divided into three vertical areas. Name these areas and their associated acronyms.

- Control zone (CTR)
- Terminal Control Area (TMA)
- Control Area & Upper control Area (CTA & UTA)

c) Name the responsible sub-organization for each of these areas.

- ?
- ?
- ?

d) Which four regulations form the basis for the Single European Sky?

- service provision regulation
- airspace regulation
- interoperability regulation
- Framework regulation

2)

What is the meaning of the acronym IATA? Historically, what has been the main function of this organization?

What are IATA's main functions at present?

IATA=International Air Transport Association

Historical Function: set airline fares and cargo rates

Present Function: operate the clearing house for the inter airline debts

3)

What cost elements contribute to the cost advantage that a typical non-scheduled charter operator enjoys over a scheduled airline?

Station Costs, passenger services, depreciation costs

4)

The European charter industry is characterized by a strong tendency towards "vertical integration". What is the meaning of the notion "vertical integration" in the context of the charter industry? Did vertical integration also take place in the U.S market? Explain.

Vertical integration is the cooperation of tour operators and charter airlines, this is not possible in the US since the anti-trust regulations prevents it.

5)

Describe the role of the national governments with respect to arranging airline tariffs in, (1) a conventional (pre-1978) bilateral agreement, (2) a 1978-91 "open market" bilateral agreement, (3) a post 1991 "open skies" bilateral.

1) governments maintained right to approve/disapprove tariffs proposed by airlines, where possible use procedures of IATA

2) Country of origin rules for scheduled tariffs and double disapproval of both governments

3) free pricing

6)

Europe, the United States and Canada are currently discussing the creation of a “Transatlantic Common Aviation Area” (TCAA), to move beyond the present “open skies” agreements. What are the four key issues that need to be resolved before (potentially) an agreement on TCAA can be reached?

- open market access within common aviation area
- nationality or ownership rules and the right of establishment
- competition policy
- regulations

7)

In the context of a hub & spoke network system, what is a “trunk route”?

The direct route between two hub airports

8)

Lean Six Sigma drives the new business culture at KLM E&M. What are the key elements of the Lean Six Sigma management philosophy?

?

9)

Indicate the primary reasons why larger aircraft generally have a lower direct operating cost per seat-kilometer relative to smaller aircraft.

The number of seats is larger while the flight equipment, airport charges and crew salary stays about the same

10)

When KLM opened its new route to Nagoya, Japan, what were the main considerations in the network development?

- direct flight AMS-NGO, without traffic rights
- Circle flight AMS-NGO-SPK-AMS with fuel stop, without traffic rights
- Circle flight AMS-NGO-SPK-AMS with traffic rights
- AMS-SPK-NGO with traffic rights

July 2007

1)

Air Traffic Control plays an important role in making air transportation possible

- a) What are the legal tasks of ATC The Netherlands?
- b) The controlled airspace can be divided into three vertical areas. Name these areas and their associated acronyms.
- c) Name the responsible sub-organization for each of these areas.
- d) Which four regulations form the basis for the Single European Sky?

See January 07 exam

2)

What is the issue that the JAR-145 (or EASA PART-145) standard addresses? What is the meaning of the acronyms JAR and EASA?

JAR=Joint Airworthiness Requirement

EASA=European Aviation Safety Agency

No aircraft used for commercial air transport may fly unless the certificate of release to service has been issued by an organization of maintenance.

3)

When considering an airline’s economic performance, what is the difference between yield and net margin?

?

4)

Indicate the primary reasons why larger aircraft generally have a lower direct operating cost per seat-kilometer relative to smaller aircraft.

See January 07 exam

5)

What are the names of the three largest global airline alliances? For each global alliance, mention three member airlines.

-Sky-Team (Airfrance-KLM, Northwest, Alitalia)

-OneWorld (Qantas, Iberia, American Airlines)

-StarAlliance (Lufthansa, United Airlines, Singapore Airlines)

6)

Describe the role of the national governments with respect to arranging airline tariffs in, (1) a conventional (pre-1978) bilateral agreement, (2) a 1978-91 "open market" bilateral agreement, (3) a post 1991 "open skies" bilateral.

See January 07 exam

7)

Describe the concept of (cost) escapability. Explain the meaning of fixed (or standing) costs and variable (or flying) costs in the context of escapability.

Different costs will require different periods of time before they can be avoided, but in the end all costs are escapable.

Fixed costs=costs which are directly escapable in the short run

Variable costs=costs which are not escapable in the short run

8)

An aircraft's operational performance can be characterized by three diagrams, viz., the payload-range diagram, the productivity diagram and the cost relationship diagram. Draw those three diagrams, explain them briefly and draw them in such a way that the relationship between the three diagrams is clear!

See flying off course, page 123

9)

What are the present R&D (Research & Development) focus areas of the Stork Fokker AESP company?

-composites

-high performance machining

-assembly

-GLARE

10)

Describe the difference between the first and the second "freedom of the air".

1st=fly over a foreign country without landing

2nd=land in a foreign country for technical reasons