



Web Based Training solutions for Flight and Cabin Crew Members

AeronautX provides full training solutions for EASA CAT and NCC operators.

The courses are designed as web based training and can be customized to meet the operator's requirements. AeronautX will provide detailed course description and training procedures which can easily be implemented into the **OM-D** to ensure compliance.

Each course except Crew Resource Management has to be completed by a course end check to satisfy checking requirements. The minimum pass mark is 75%.

All training activities are managed and documented through our learning management system and can be monitored by the responsible training manager.

Training packages are available at competitive prices.

Following courses are available

ACAS / TCAS Training	AMC1 AUR.ACAS.2010
ACAS 7.1 Differences	AMC1 AUR.ACAS.2010
Aviation Security Training (not including the NASP)	ORO.CC.140 (d)
Contaminated Runway and Runway Reports	IOSA
Crew Resource Management Recurrent Training (CRM)	ORO.FC.230 (e)
Dangerous Goods Recurrent Training (Cat. 10 & 11)	SPA.DG.105 (a)
Emergency Equipment Training	AMC1 ORO.CC.127
ETOPS	SPA.ETOPS.105 (b)
EWIS Group 7 & 8	EASA AMC 20-22
Fatigue Management Training	AMC1 ORO.FTL.250
Fire Fighting / Smoke removal (Theory)	AMC1 ORO.FC.220(c)(2); C.230 (2); TC.115 (2)
First Aid	AMC1 ORO.FC.220 (c) (2); ORO.CC.140 (d)
Flight Hazards	IOSA
Flight Performance CS25 - General Requirements	IOSA
Flight Safety Concepts including TEM	IOSA



Low Visibility Operation (theoretical knowledge)	SPA.LVO.120
MEL Introduction Course	AMC1 ORO.GEN.110(e)
North Atlantic High Level Airspace (NAT HLA)	SPA.MNPS.105 (c)
Performance Based Navigation (incl. B- and P-RNAV)	SPA.PBN.105 (b)
Pilot Incapacitation - General Knowledge	ORO.CC.125 (d); AMC1 ORO.FC.230 (c)
RVSM (EUR)	SPA.RVSM.105 (c)
RVSM (International)	SPA.RVSM.105 (c)
Upset Prevention and Recovery Training (UPRT)	Annex II to ED Decision 2015/12/R
Volcanic Ash Avoidance	IOSA FLT 2.2.16B
Winter Operation (De- Anti Ice Training)	Recommendations for De-icing / Anti-icing Aeroplanes on the Ground 3.6.1
FOO Recurrent Training (Cycle 1 of 3)	IOSA
FOO Human Factors (Recurrent)	IOSA
Do328/100 Recurrent Training (1 of 3)	AMC1 ORO.FC.230



Aviation Security Training



The Aviation Security Training is a specialized **Flight Operations Training** (Flight and Cabin Crews, Ground Operations personnel, all entities applying aviation security standards). The training focuses on security in aviation including airports, passenger, cargo as well as in flight security and is based on existing **ICAO** as well as **European regulations**. At the end of the course the users will understand the common rules to **protect civil aviation against acts of unlawful interference** that jeopardise the security of civil aviation.

Following content is presented in simplified English and can be anytime implemented into the initial as well as recurrent training. It consists of 2 parts and is fully multimedia based. The course follows the appropriate European Regulation and includes following topics:

Content:

- General Overview on ICAO Annex 17
- Terms and Definitions
- Introduction to Aviation Security
- Airport Security including:
 - Airport Planning Requirements
 - Access Control
 - Screening of persons other than passengers and items carried
 - Surveillance, patrols and other physical controls
- Aircraft Security Procedures including:
 - Searching and Checking Aircraft
 - Protection of passengers and cabin baggage
 - Screening of passengers and cabin baggage
 - Prohibited articles / exemption of liquids



Crew Resource Management Training



The following **CRM modules** can be used for the 3 years recurrent training cycle and fulfil the requirements of ORO.FC.230 (e).

Content:

- Human Factors Basic Concepts
- Human error and reliability, error chain, error prevention and detection
- Company safety culture, SOPs, organisational factors (General)
- Stress, stress management, fatigue and vigilance
- Information acquisition and processing, situation awareness, workload management
- Decision Making incl. FORDEC
- Communication and coordination inside and outside the cockpit
- Leadership and team behaviour, synergy
- Automation and philosophy of the use of automation
- Additional areas which warrant extra attention, as identified by the accident prevention and flight safety programme

The following topics have to be filled with company specific information or conducted as attendance training:

- Case based studies
- Specific type-related differences
- Automation and philosophy / type and operator specific
- Company safety culture, SOPs, organisational factors

Duration: 4 hrs.



Dangerous Goods Training



Our **Dangerous Goods Training** gives the operational flexibility and offers the possibility of initial and continuous training when and where it is needed. Beside the operational benefits, our **Multimedia Based Dangerous Goods Training** for Flight crews, Cabin crews, Flight operations officers or Ground staff can help you to save Training costs and is based on the current IATA Dangerous Goods regulations.

The overall goals of our Dangerous Goods Training Program are:

- To increase aviation safety through improved training and evaluation
- To be responsive to changes in dangerous goods regulations and handling
- Decrease Training Costs

Content:

The Dangerous Goods Training includes:

- General philosophy
- Limitations
- General requirements for shippers
- Classification
- List of dangerous goods
- General packing requirements
- Packing instructions
- Labelling and marking
- Shipper's Declaration and other relevant documentation
- Acceptance procedures
- Recognition of Undeclared Dangerous Goods
- Storage and loading procedures
- Pilots' notification
- Provisions for passengers and crew
- Emergency procedures



Emergency Equipment Training



The **first responsibility** of a cabin crew member is to ensure the **safety of passenger on board an aircraft**. The crew has to be able to act decisively in emergency situations and **apply standardized emergency procedures** precisely.

This course provides an overview on emergency equipment on board an aircraft.

The training course is based on comprehensive theoretical instruction in:

- Doors and emergency exits
- Smoke detection
- Fire detection
- Fire fighting equipment incl. Hand fire extinguishers
- Aircraft Oxygen equipment
- Emergency Lights
- Various emergency equipment incl. First Aid Kits, PBA and Life jackets

The average learning time for the training is about **1 hour**.



ETOPS



In commercial air transport operations, **two-engine aeroplanes** shall only be **operated beyond the appropriate threshold distance** if the operator has been granted an **ETOPS** operational approval by the competent authority. Part of the approval is the **requirement of training of light crew member** and **all other operations personnel** involved in these operations.

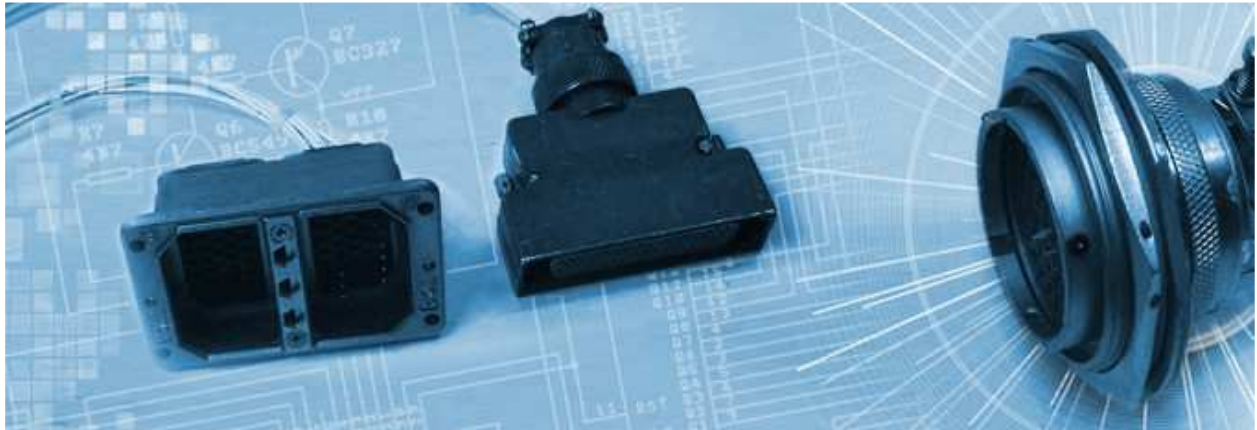
Our training courseware deals with the following subjects:

- Overview of the history of ETOPS
- ETOPS regulations
- Definitions
- Approved One-Engine-Inoperative Cruise Speed
- ETOPS Type Design Approval
- Max. approved diversion times and time-limited systems capability
- ETOPS Operations Approval
- ETOPS requirements for aerodromes incl. enroute alt.
- ETOPS Area and Routes
- ETOPS Fuel requirements
- Critical Fuel
- Minimum Equipment List
- Communication and Navigation requirements



EWIS - TRAINING

ELECTRICAL WIRING INTERCONNECTION SYSTEM



The EWIS Training is a web-based training solution, **based on EASA AMC 20-22 and FAA AC120-94.**

EWIS Initial and Continuation Training is now mandatory in order to comply with the training requirements in paragraphs 21.A.145 and 21.A.245 of Part-21, 145.A.30 and 145.A.35 of Part-145 and M.A.706 of Part-M with respect to EWIS for EASA. For the FAA these requirements are covered in Sections 121.375 and 129.14 of 14CFR.

As the training will be presented on a generic level, an additional introduction into the real application for the aircraft types in use shall be added by the customer in a classroom session.

Course E Group 7 & 8 Flight Deck and Cabin crew

The EWIS Training includes the following modules:

- MODULE A - General Electrical Wiring Interconnection System Practices
- MODULE B - Wiring Practices Documentation
- MODULE C - Inspection
- MODULE D - Housekeeping
- MODULE E - Wire
- MODULE F - Connective Devices
- MODULE G - Connective Device Repair



Fatigue Management Training



Fatigue has been identified as a contributing factor to several accidents and incidents. It has long been recognised that fatigue, sleep loss and circadian disturbance can **degrade performance and therefore have an influence on safety.**

Under ORO.FTL, operators are required to monitor and manage the risk resulting from crew member fatigue within their operation. Part of the Fatigue Risk Management is to provide appropriate Fatigue Management Training to crew member according to AMC1 ORO.FTL.250

The interactive web-based training includes the following topics and can be customized to reflect the operators fatigue risk management if required:

- Applicable regulatory requirements for flight, duty and rest
- The basics of fatigue including sleep fundamentals and the effects of disturbing the circadian rhythms
- The causes of fatigue, including medical conditions that may lead to fatigue
- Fatigue countermeasures
- The effect of fatigue on performance
- The influence of lifestyle, including nutrition, exercise, and family life on fatigue
- Familiarity with sleep disorders and their possible treatments
- The effects of heavy short range schedules on individuals (if applicable)
- The effect of operating through and within multiple time zones (if applicable)
- The crew member responsibility for ensuring adequate rest and fitness for flight duty

Our web-based course was specially developed for

- Flight and cabin crew
- Management
- Maintenance personell

A final check completes the training.

Duration: 2 hours



Fire Fighting & Smoke Removal Training



Smoke and fire on board an aircraft create some of the **most critical incidents in aviation**. Flight as well as Cabin Crew members have to perform **initial** as well as **recurrent** firefighting and smoke removal training. This course provides the theoretical knowledge required on this topic.

As a **completely web-based courseware** it is also targeted to train causes and measures for prevention of smoke and smell development in the cockpit.

Our web-based course was specially developed for people whose jobs **require an awareness of fire protection and fire-fighting measures** on board an aircraft, such as:

- Flight Crew
- Cabin Crew

The training course is based on comprehensive theoretical instruction in:

- General aspects regarding smoke and fire on board an aircraft
- Fire classification, development and extinguishing
- Fire extinguishing agents
- Operation of fire extinguishers
- Wire Degradation
- Circuit Breakers
- Communication and General Procedures

A final check completes the training.

Duration: 1 hour



First Aid Training



Our First Aid Training gives the **necessary operational flexibility** and offers the **possibility of continuous training** when and where it is needed. Beside the operation benefits, our Web Based First Aid Training can help you to **save Training costs** and **conforms to the requirements of EU OPS 1**.

- Flight crews
- Cabin crews
- Flight operation officers
- Ground staff

The overall goals of our First Aid Training Program are:

- To increase aviation safety through improved training and evaluation
- To be responsive to changes in first aid regulations and handling
- Decrease Training Costs

The First Aid Training includes:

- Physiology of Flight incl. Hypoxia
- Medical Emergencies
- Allergic Reaction, Hyperventilation, Airsickness, Epilepsy, Heart Attack,
- Stroke, Diabetes, Asthma
- Basic First Aid
- Bleeding, Burns, Fractures, Head injuries, Drowning, Heat Exhaustion,
- Heatstroke, Unconsciousness, Shock, the principles of Resuscitation,
- Assessing the Casualty, the recovery Position, Restoring the circulation,
- Resuscitation for Children, Chocking



Flight Hazards



Icing, thunderstorms, wind shear and turbulence can present serious hazards to your flight operation. This **training will raise awareness on possible flight hazards** and helps you to understand the forces behind these phenomena.

The course focuses on the occurrence, development and effects of those flight hazards. By increasing your understanding of these subjects you will improve your ability to avoid the associated hazards.

The backbone of this course is the **Learning Management System (LMS)** which allows the organization, tracking and documentation of the training activities. Self assessment questions are directly linked to the multimedia-based training allowing the student to check his knowledge.

The Flight Hazards course covers the following topics:

- Icing
- Turbulence
- Wind Shear
- Thunderstorms
- Tornadoes
- Inversions
- Hazards in mountainous areas
- Visibility reducing phenomena

Duration: 1 hour



Flight Performance

for CS25 certified aircraft



This course provides a comprehensive overview on the **performance requirements for CS25 certified aircraft** and serves as a perfect tool to refresh basic knowledge requirements.

Our multimedia based training courseware prepares participants for the operational duties relevant to every-day practice in a targeted manner.

For this the students have to look into the following:

- Definition of terms used
- Take off Distances
- Accelerate stop distance
- Balanced and unbalanced field length concept
- Performance limited take-off mass
- Take off performance on wet and contaminated runways
- Use of Reduced and Derated Thrust
- Climb
- Cruise
- En-route One Engine Inoperative
- Descent
- Approach and Landing

The average learning time for the training is about **4 hours**.



Flight Safety Concepts

including Threat and Error Management



'Threat management' means the process of detecting and responding to the threats with countermeasures which reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired aircraft states.

Threat and Error Management as well as Flight Safety is a **core competence of flight instructors** and shall be part of each training as well assessment. This course will **raise awareness** on Flight Safety in general as well as Threat and Error Management in special. By **increasing your understanding** of these subjects, you will **improve your ability** to respond accurately to possible threats, mitigate errors and therefore increase the overall safety of your operation.

The backbone of this course is the **Learning Management System (LMS)** which allows the organization, tracking and documentation of the training activities. Self assessment questions are directly linked to the multimedia-based training allowing the student to check his knowledge.

The Flight Safety Concepts course covers the following topics:

- Flight Safety Concepts incl. the SHELL and Swiss Cheese Model
- Threat and Error Management
- Human Error
- Error Chain

Duration: 20 minutes



Low Visibility Operations Training



The Low Visibility Operations Training can be used for **initial pilot training, familiarization training and recurrent/refresher training**, but also for other aircraft or airport personnel involved in **low visibility operations**. The course covers all aspects of the **European Aviation Safety Agency (EASA)** recommendations for low visibility training as stated in **EU OPS 1** and follows the guidelines of **CS-AWO** and the **European Guidance Material on Aerodrome Operations under Limited Visibility Conditions**.

The course addresses three primary areas:

- Increased awareness during operation under low visibility
- Prevention of incidents and accidents
- Recognition of the role of ATC and ground operations during low visibility operations

The training gives information on a wide range of subjects including general operating procedures, airborne equipment, airport equipment and lighting, ATC procedures, and the impact of reduced visibility due to fog, rain and snow. **A special module which is customized to your company and aircraft-specific procedures and regulations can be added to the course.**

The Low Visibility Operations Training contains the following modules:

- **Module 1** – INTRODUCTION TO LOW VISIBILITY OPERATION
- **Module 2** – AEROPLANE AND FLIGHT CREW
- **Module 3** – ATC
- **Module 4** – AERODOME
- **Module 5** – VISUAL ASPECTS
- **Module 6** – OPERATIONS



North Atlantic High Level Airspace (NAT HLA)



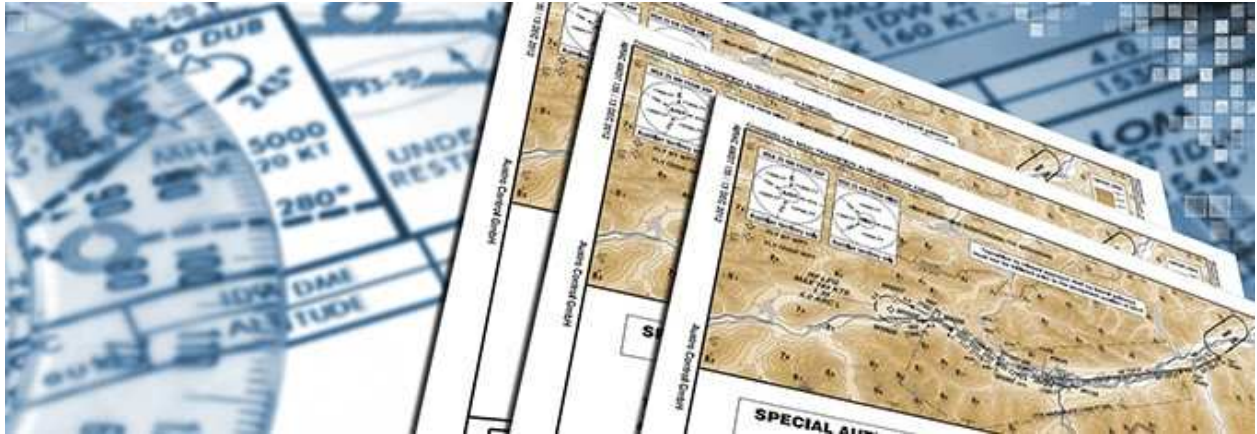
Part OPS (SPA.MNPS.100) requires that aircraft shall only be operated in **designated minimum navigation performance specifications (MNPS) airspace in accordance with regional supplementary procedures**, where minimum navigation performance specifications are established, if the operator has been granted an approval by the competent authority to conduct such operations. One requirement to obtain such an approval is that a training program for flight crew members involved in these operations has to be provided.

Our training courseware deals with the following subjects:

- North Atlantic Track system (NAT)
- MNPS Airspace
- Organised Track System and structure
- Aircraft system requirements
- Flight planning requirements
- Communication and Clearances
- Mach Number Technique
- System Degradation or failure
- In flight contingencies



Performance Based Navigation (PBN)



Performance Based Navigation (PBN) is a new concept based on the use of Area Navigation (RNAV) systems. **The aim of the PBN concept is** to ensure global standardisation of RNAV and RNP specifications and to limit the proliferation of navigation specifications in use.

The Performance Based Navigation (PBN) course is based on the ICAO Performance-based Navigation (PBN) Manual and is divided into two parts.

Part 1 provides general information on Performance Based Navigation concept including terminology and explains the basic idea.

Part 2 of the training covers details of the appropriate RNAV and RNP specifications.

Content:

The Performance-Based Navigation (PBN) Concept:

- Components of PBN
- Scope
- Terminology
- RNAV versus RNP system
- Advantages
- PBN Operation
- Designation of RNP and RNAV specification
- Application of RNAV and RNP specifications
- RNAV and RNP systems

Implementing RNAV Operations:

- RNAV 1 and 2
- RNAV 5
- RNP 10
- RNP 4



Pilot Incapacitation Training



The **safe operation of an aircraft** places many demands on the **pilot** and **crew**. In order to meet these demands, a crew member requires **good mental and physical health**. The impairment of physical or mental capability has serious implications for the **safety of flight**.

Given certain conditions, **anyone can become incapacitated**. It is **essential** that pilots **know** what **incapacitation is**, how **best to avoid** it, and **how to deal with it**. The Pilot Incapacitation Training familiarises **flight** as well as **cabin crew members** with the special requirements and causes when a pilot becomes incapacitated.

- Flight Crew
- Cabin Crew

The multimedia-based training covers the following topics:

- Definitions
- Causes for Pilot incapacitation
- Symptoms
- Detection
- Difference between fits and faints
- Coping strategies
- Operating procedures

Duration: 30 minutes



Reduced Vertical Separation Minima (RVSM) Training



The purpose of **Reduced Vertical Separation Minimum** is to **increase airspace capacity** by permitting the application of a **1000ft vertical separation minimum** between suitably equipped aircraft in the level band between **FL290 to FL410** (inclusive).

An operator shall not operate an aircraft in this RVSM airspace unless an RVSM approval has been granted.

Our RVSM course describes the **requirements, operation** as well as **limitations to operate in RVSM airspace** and fulfils the training requirements according **EU-OPS**.

The multimedia based training covers the following topics:

- Introduction to RVSM incl. Objectives, history and purpose
- Training requirements
- RVSM approval requirements and approval process
- RVSM procedures; from pre-flight to post-flight
- RVSM contingency procedures
- Flight planning requirements
- RVSM Phraseology
- ACAS / TCAS requirements

The course is finished by a questionnaire to check the trainee's knowledge.



International RVSM

International Reduced Vertical Separation Minima (RVSM) Training



This program will familiarize the applicant with the **requirements for operating in RVSM airspace** and fulfills the requirements of **SPA.RVSM.105 (c)**. The training highlights the special requirements for different RVSM airspace around the world.

The **International RVSM Training** includes the following topics:

- What is RVSM
- Why RVSM
- Objectives
- Approval Process
- RVSM Performance
- Equipment for RVSM Operation
- Height Monitoring
- Operating Practices and Procedures
- Flight Planning Procedures
- Related Regulations
- ATC/Pilot Procedures / RVSM
- TCAS / ACAS requirements

RVSM Regions included:

North America, South America, Europe, China, Russia, Australia and South Africa.



ACAS Flight Crew Training



The **Airborne Collision Avoidance System II (ACAS II)** has been introduced to **reduce** the risk of mid-air collisions or near mid-air collisions between aircraft. It serves as a last-resort safety net irrespective of any separation standards. It is required that Flight Crews demonstrate an understanding of ACAS II operation and the criteria used for issuing TAs and RAs as well as the operation of ACAS in the interpretation of presented information by ACAS. The course has been designed to provide the required academic knowledge and fulfills the **requirements of GM1 CAT.OP.MPA.295**. The training will be completed through a test at the end of the course.

The ACAS Flight Crew Training Program covers the following topics:

- **Theory of operations**
- **System operation including**
 - Surveillance function
 - Collision avoidance
 - Advisory thresholds
 - ACAS limitations
 - ACAS inhibits
- **Operating procedures including**
 - Use of controls
 - Display interpretation
 - Differences between Version 7.0 and 7.1
 - Operation on the ground
 - Operating modes
- **Case studies**
- **Communication**

Duration: 2 hrs.



Volcanic Ash Avoidance Training



Volcanic Ash Avoidance Training is required by Part OPS as initial as well as recurrent training. The course has been designed to **familiarize flight crews** as well as **flight dispatchers** with the risks of flight operations with known or forecasted volcanic ash contamination.

The backbone of this course is the **Learning Management System (LMS)** which allows the organization, tracking and documentation of the training activities. Self assessment questions are directly linked to the multimedia-based training allowing the student to check his knowledge and understanding.

The Volcanic Ash Avoidance Training course covers the following topics:

- General Information on volcanic activities
- Effects of volcanic ash on airports and airplanes
- Indicators of volcanic ash
- Hazards
- Volcanic ash advisory
- Volcanic ash reporting
- Hazard and risk assessment

Duration: 50 minutes



Winter Operations - De-/Anti-icing

Aircraft on the ground



This multimedia based training course was developed and **designed specifically** to meet **the needs of flight crew and ground staff dealing with de-/anti-icing** procedures in their ever-day work (eg. Flight Crew, Cabin Crew, Maintenance Personnel, Airport Personnel, Authorities). The training is **updated** annually according to the **AEA Recommendations** for De-/Anti-Icing on the Ground.

The multimedia-based training covers the following topics:

- What is aircraft icing up
- Types of ice build-up
- De-/Anti-icing fluids-types & characteristics
- Hold Over Time (HOT)
- De-/Anti-icing procedures
- De-/Anti-icing equipment
- De-/Anti-icing checks (general)

The particularity of this courseware is **not only** the explanation of aircraft icing up, de-/anti-icing fluids, hold over time, de-/anti-icing procedures, equipment and checks **but especially** the **freeplay simulations**. They **allow** trainees to **select different weather conditions, temperatures and mixture ratios** of de-icing fluids in order to determine hold-over-times. **Stage checks** and a final test complete the training.

Duration: 4 hrs.