

Mar 15th, 1:15 PM

## Challenging the Status Quo of Aviation Training

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Arola, Andrea, "Challenging the Status Quo of Aviation Training" (2016). *National Training Aircraft Symposium (NTAS)*. 21.

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Aerosim **ETHOS**<sup>®</sup>  
PILOT TRAINING

Challenging the Status Quo  
of Aviation Training



# The Aerosim Story

In 1993, Aerosim was founded based on a discussion with an airline pilot who was explaining how complicated the Flight Management System was in the aircraft. The challenge was no one could produce an FMS training solution on a desktop computer.

**1998-2005:** Incredible growth period with product line

**2009:** Acquisition of Delta Connection Academy

**2010:** Aerosim Training Solutions founded (Part 142)

Today, Aerosim delivers training solutions and products to three main customer bases:

- Pilot Training for an ab-initio through Type Rating
- Airlines and Training Centers
- Government and Military

# Our Customers, Over 180 Strong

Aeromexico (Boeing)  
Aerolíneas Argentinas (Boeing)  
Aerostar Training Services  
Agusta Westland  
Air Astana  
Air Canada  
Air Canada Jazz  
Air China  
Air France  
Air New Zealand  
Air Nippon  
AirTran (SWA)  
Alitalia  
All Nippon Airways (ANA)  
Aloha Airlines  
American Airlines  
Arizona State University  
Andrews Air Force Base  
Atlas  
AVIANCA  
Aviation Research Center  
Boeing Corporation  
British Airways  
Bombardier

CanJet  
China Eastern  
China Southern  
Cirrus Aircraft  
CommutAir  
Copa Airlines  
Delta Air Lines  
DHL Aero Expreso  
Dubuque University  
Dubai Aerospace  
Flybe  
Emirates  
Embraer  
Embry Riddle University  
Envoy  
Ethiopian Airlines  
EVA Airways  
Egypt Air  
ExpressJet  
Far Eastern Air Transport  
FedEx  
FlightSafety International  
FlyDubai  
Finnair Flight Academy

GOL Intelligent Airlines  
Hainan  
Hawaiian Airlines  
Henderson State Univ.  
Horizon Air  
Island Air  
Jacksonville University  
Japan Air Commuter  
Japan Airlines  
Jetstream Aviation  
JetBlue  
Kansas State University  
Kenya Airways  
LATAM Airlines Group  
Lewis University  
Lufthansa  
Miami Air  
Middle Tennessee State  
Minnesota State Mankato  
National Airlines  
Omni Air International  
PSA Airlines  
Polar Air Cargo

QantasLink  
Shenzhen Airlines  
SkyWest (USA)  
SkyWest (Australia)  
South African Airways  
Southwest Airlines (SWA)  
Spirit Airlines  
St. Cloud State University  
Sun Country Airlines  
Sun Express  
SunWing  
TAM Airlines  
Thomas Cook Airlines  
Tianjin Airlines  
TRU  
United Airlines  
UPS (United Parcel Service)  
US Airways  
United Parcel Service  
University of North Dakota  
Virgin Atlantic  
Xiamen Airlines  
WestJet Airlines

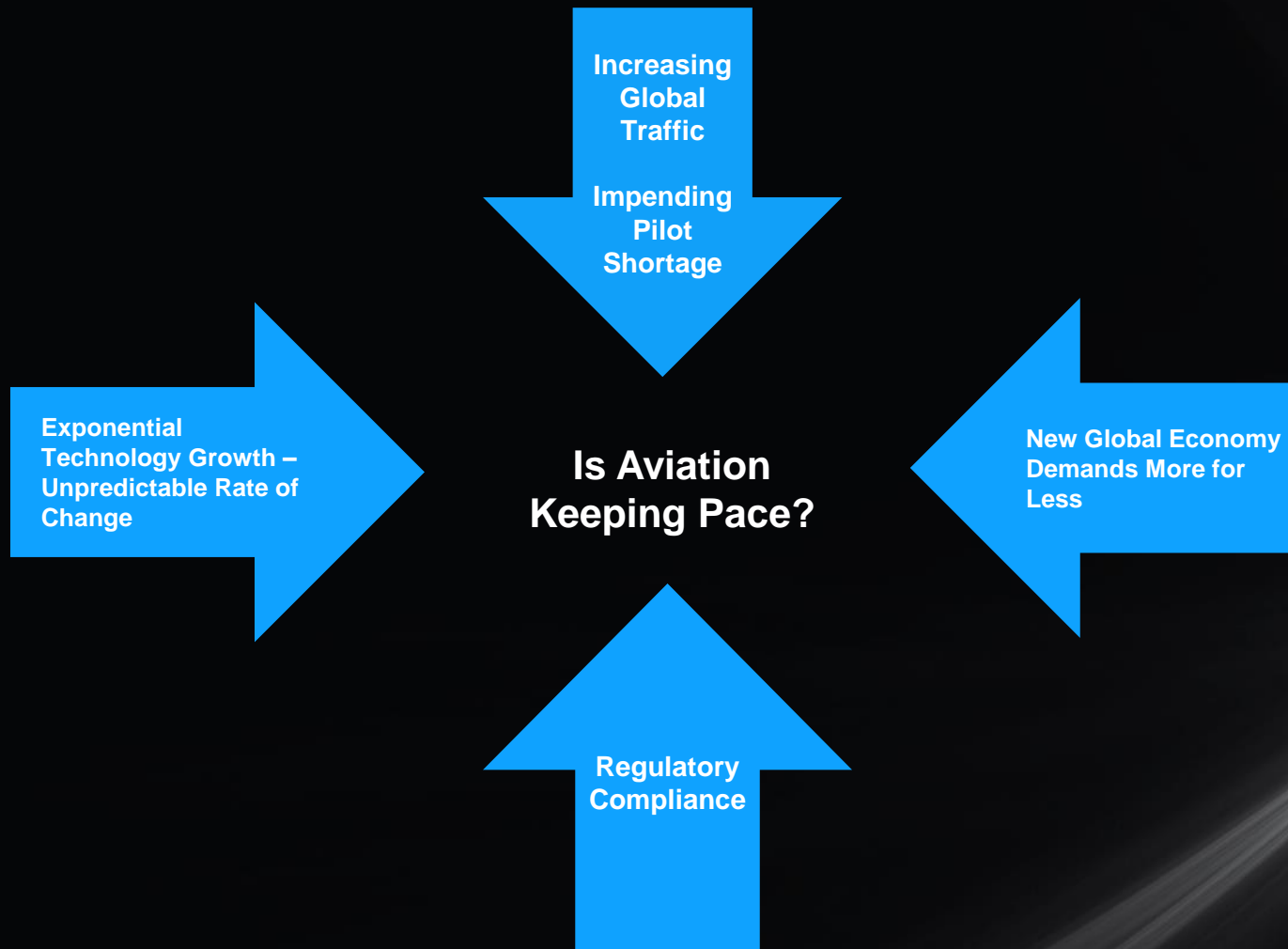
# Generational Shift Occurring in Aviation Training

- Management acceptance of new training technology
- Students going to flight academies for a direct career path to become a professional pilot
- New levels of economic accountability forcing a holistic “rethink” of how to best train pilots and technicians

# Technology is Advancing

- Improving the quality of simulated training, while creating efficiency and reducing costs
- Lower cost training devices offset time in the Full Flight Simulator
- Distance learning, mobile devices enables training anytime, anywhere
- Reducing costs and footprint

# Broader Pressures are at Work



# The Opportunity

To challenge the status quo of the aviation training continuum.

## **The Aerosim approach?**

Supplying the world with better pilots by harnessing technology to shift training effectiveness earlier in the continuum.

Your pilots don't just fly. They are on a journey. One, continuous mission to be the best, most consistent pilots they can be. That's why at Aerosim, we approach training with the same dedication to continuum.



The future requires a new approach.

# Integrated Products for Efficiency in Training

Aerosim **ETHOS**<sup>®</sup>  
PILOT TRAINING

# Pilot Training

Self-paced Learning/Distance Learning

Instructor-led Training

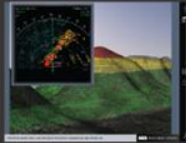
## Systems Knowledge

DISTANCE LEARNING

Knowledge Preparation

+

FMS Skills



## Procedure Training

DISTANCE LEARNING

TRAINING CENTER

Procedure Skills Lessons\*

+

Procedure Practice



Procedure Training

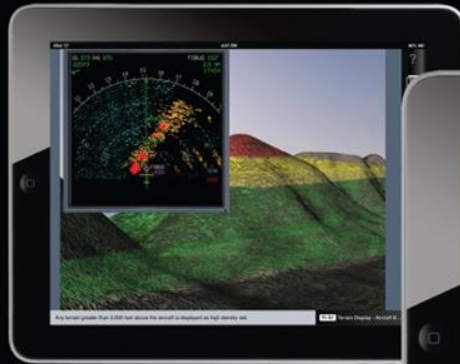


Virtual Procedure Trainer

# Systems Knowledge

# Systems Knowledge

## Cockpit Familiarization



Aircraft Systems & General Subjects



FMS Skills



Practice Exam





CRJ700 ACARS  
Trainer for PSA




Cockpit  
Familiarization



FMS Skills



FMST Freeplay



Practice Exam



Aircraft Systems



Systems Knowledge

# COCKPIT FAMILIARIZATION



## ▼ Cockpit Familiarization

	<i>Est. Run-Time</i>	<i>Lesson Progress</i>	
Cockpit Familiarization	1:00:00	<b>COMPLETED</b>	<b>REVIEW</b>

# Systems Knowledge



## Learning Management System (LMS)

All products are designed to interface with an LMS for progress tracking, recording and course completion data. LMS Progress reports available. Content is AICC / SCORM compliant.

# Systems Knowledge



## Cockpit Familiarization

Study tool to help pilots prepare for their oral exam and checkride by delivering detailed system information for every panel, switch, light, and display in the flight deck.



## APU FIRE PUSH Switchlight

Study

CLEAR

IMAGE

Arms the APU bottle squib.

Closes the APU bleed air load control valve and turns off the APU fuel pump.

- APU FIRE PUSH (red) light indicates that a fire is detected in the APU enclosure.





# Systems Knowledge



## Aircraft Systems & General Subjects

Provides structured courseware learning with multiple distance learning deployment methods. Includes aircraft systems and general subjects.




CRJ700 ACARS  
Trainer for PSA




Cockpit  
Familiarization



FMS Skills



FMST Freeplay



Practice Exam



Aircraft Systems



Systems Knowledge

# AIRCRAFT SYSTEMS



## ▼ Aircraft Familiarization

	<i>Est. Run-Time</i>	<i>Lesson Progress</i>	
System Description	🕒 13:30	▬ 0%	<b>RUN</b>

## ▼ Air Conditioning

	<i>Est. Run-Time</i>	<i>Lesson Progress</i>	
System Description	🕒 11:45	▬ 0%	<b>RESUME</b>

## ▼ Ventilation

	<i>Est. Run-Time</i>	<i>Lesson Progress</i>	
System Description	🕒 12:45	▬ 0%	<b>RUN</b>

## ▼ Pressurization

	<i>Est. Run-Time</i>	<i>Lesson Progress</i>	
System Description	🕒 17:15	▬ 0%	<b>RESUME</b>

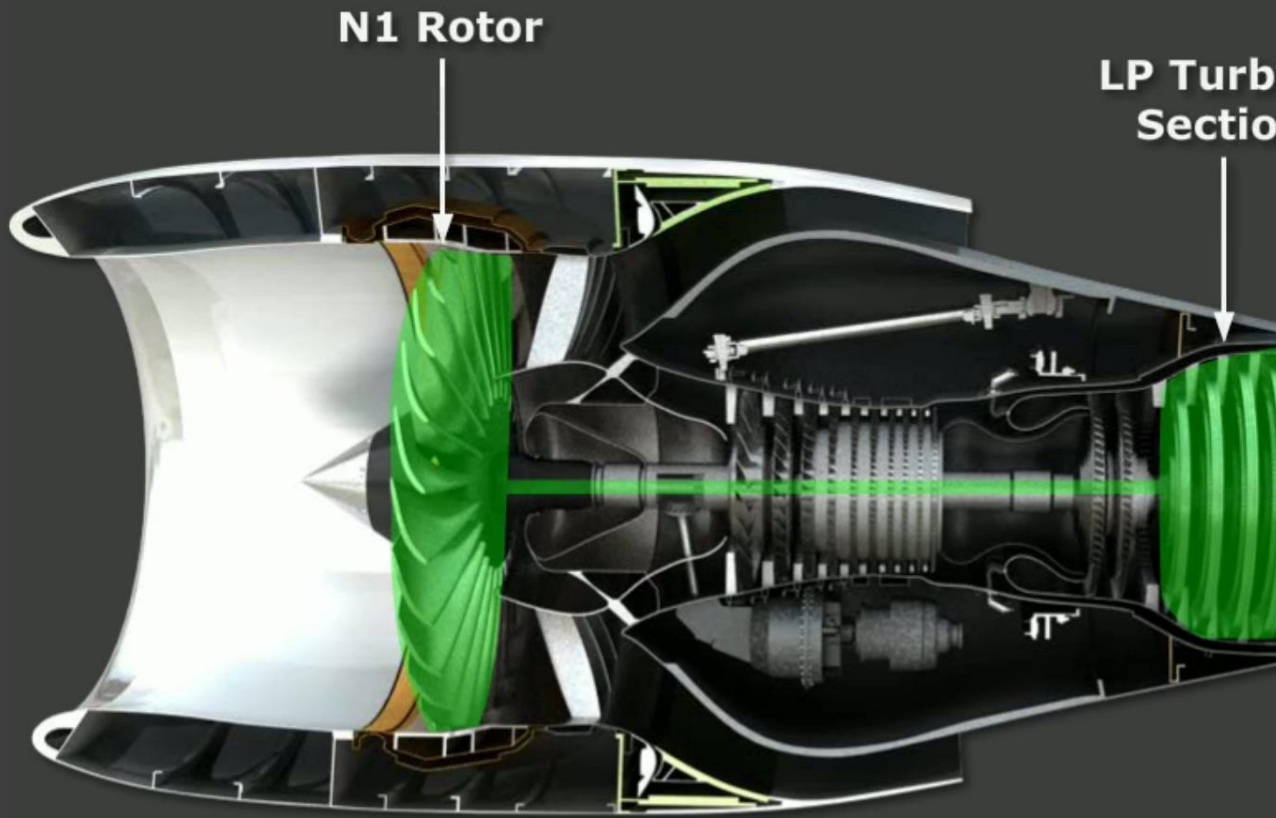
## ▼ Autoflight

	<i>Est. Run-Time</i>	<i>Lesson Progress</i>	
System Description	🕒 52:00	▬ 4%	<b>RESUME</b>

## ▼ Communications

	<i>Est. Run-Time</i>	<i>Lesson Progress</i>	
System Description	🕒 29:00	▬ 0%	<b>RUN</b>

## ▼ Electrical



**N1 Rotor**

**LP Turbine Section**

TEXT

INDEX

Each engine contains an N1 fan rotor and an N2 compressor rotor.

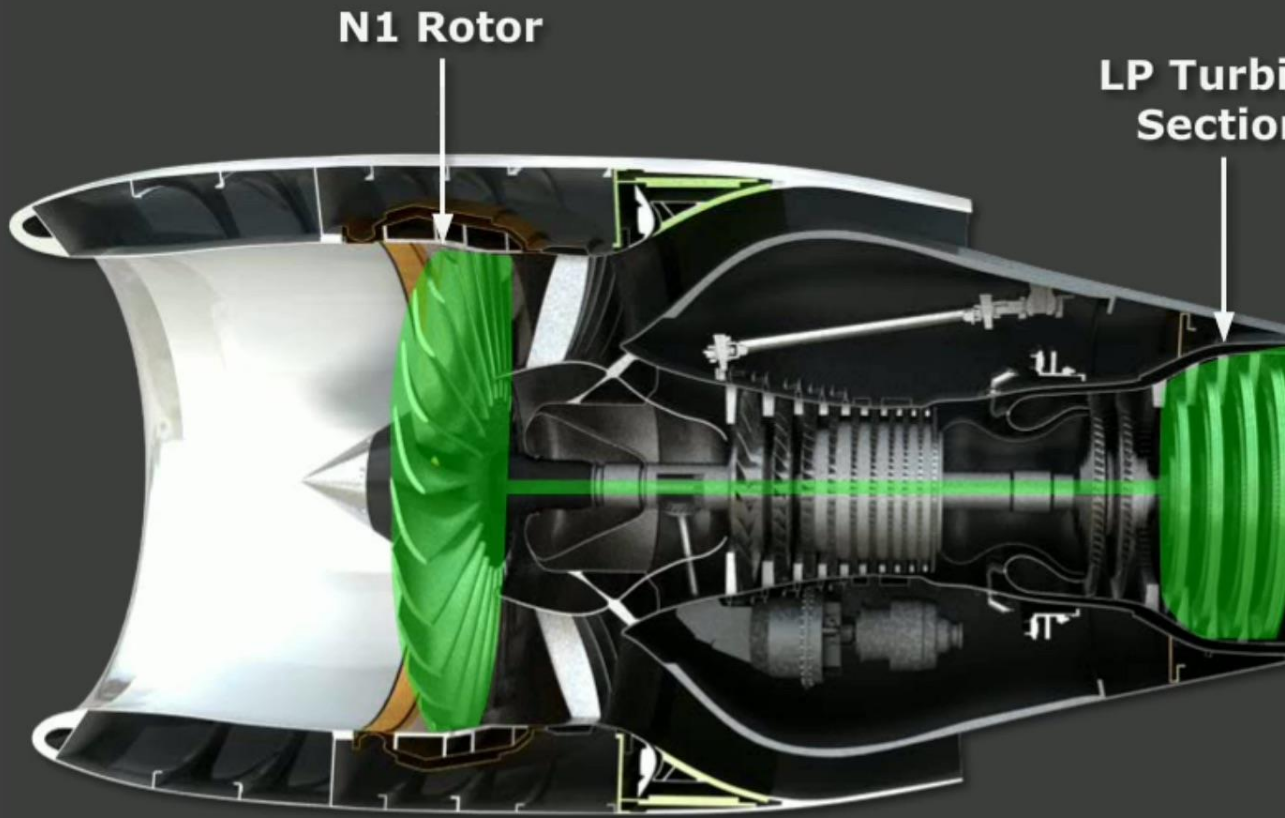
The N1 rotor consists of a single stage fan connected to a 4-stage low pressure turbine.

The N2 rotor is a 10-stage compressor connected to a 2-stage high pressure turbine.



Est. Time Remaining  
01:21





TEXT

INDEX

- 1 Overview
- 2 Ignition during Engine Start
- 7 Starting System**
  - 1 Overview
  - 2 Operation
- 8 Self-Assessment**
  - 1  Question 1
  - 2  Question 2
  - 3 Question 3
  - 4 Question 4
  - 5 Question 5
  - 6 Question 6
  - 7 Question 7
  - 8 Question 8



Est. Time Remaining  
01:21





CRJ700 ACARS  
Trainer for PSA

Cockpit  
Familiarization



FMS Skills



FMST Freeplay



Practice Exam



Aircraft Systems



General Subjects

Systems Knowledge

# GENERAL SUBJECTS



## Adverse Weather and Windshear

	Est. Run-Time	Lesson Progress	
Overview	🕒 43:45	📊 0%	RESUME

## CFIT and ALAR

	Est. Run-Time	Lesson Progress	
CFIT	🕒 23:30	📊 0%	RESUME
ALAR	🕒 31:45	📊 0%	RUN

## Human Factors

	Est. Run-Time	Lesson Progress	
CRM and Decision Making	🕒 34:45	📊 0%	RESUME
Threat and Error Management	🕒 18:45	📊 0%	RESUME

## High Altitude Operations

	Est. Run-Time	Lesson Progress	
Overview	🕒 37:30	📊 0%	RUN

## RVSM

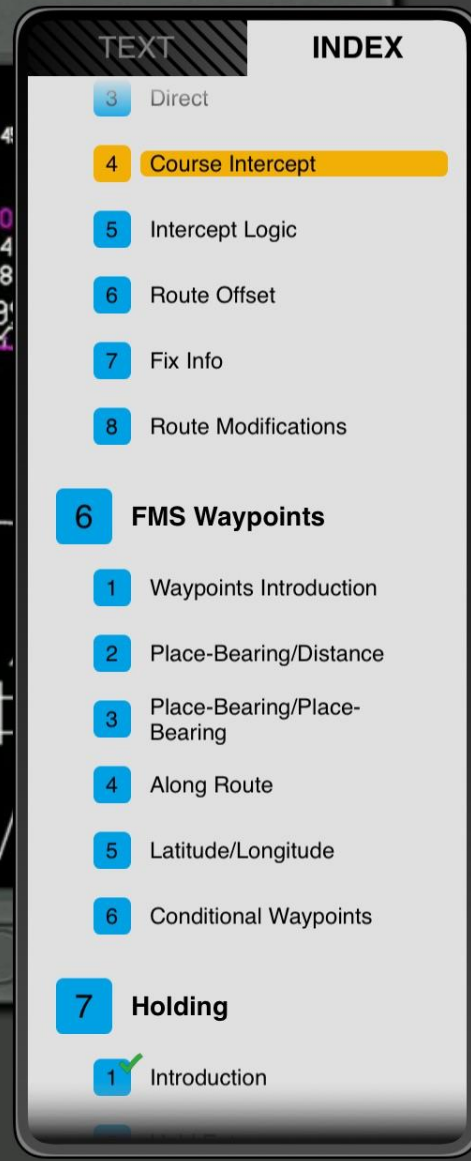
	Est. Run-Time	Lesson Progress	
Overview	🕒 20:30	📊 0%	RUN

# Systems Knowledge



## FMS Skills Lesson

Scenario-based and interactive lesson teaching every step of FMS, autoflight, and navigation during all phases of flight.



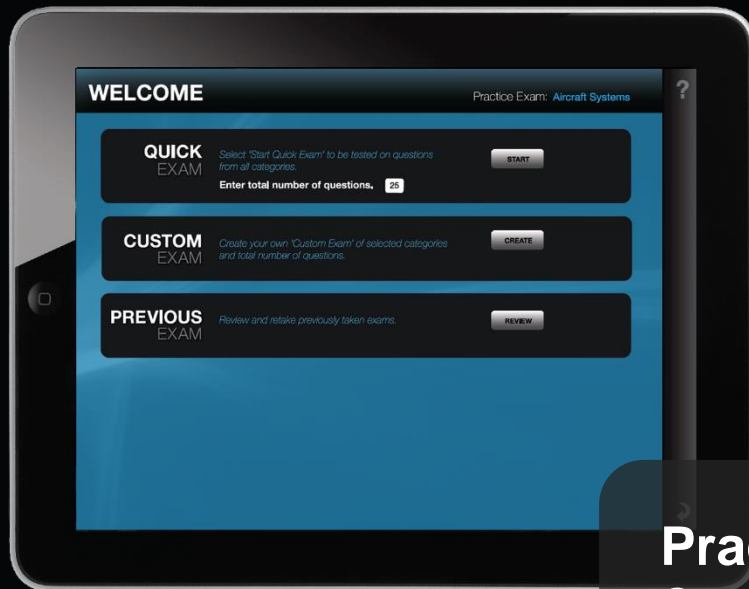
ATC: "Bluestreak 5051, when able, intercept the 350 degree course to HICKI."

Est. Time Remaining  
00:22

Enter 350 into the INTCCRS line and execute the change.

\*Action Required

# Systems Knowledge



## Practice Exam

Generates exams based on aircraft system categories and desired number of questions. Start a quick exam or create custom exams, and review, retake, or continue previous exams.



## QUICK EXAM

Start a Quick Exam to be tested on questions from all categories.

START

Enter total number of questions

## CUSTOM EXAM

Create your own Custom Exam of selected categories and total number of questions.

CREATE

Custom Exam 1 August 6, 2015

START

INFO

Custom Exam 4 October 27, 2015

START

INFO

Custom Exam 5 November 3, 2015

START

INFO

## PREVIOUS EXAM

Review, retake, or continue previous exams.

REVIEW

# CREATE CUSTOM EXAM

Practice Exam: Practice Exam



STEP 1

Create exam name *(Limit 20 characters)*

Custom Exam 1

STEP 2

Select exam categories

Select all

ACARS

Air Conditioning

Aircraft Familiarization

APU

Autoflight

Communications

Differences

Doors and Windows

EICAS

Electrical

Emergency Equipment

Engines

Fire Protection

Flight Controls

Flight Instruments

Fuel

Hydraulics

Ice and Rain Protection

STEP 3

Select the total number of questions

215

*(215 available for selected categories)*

STEP 4

Create custom exam

*(Selecting 'Cancel' will return to Welcome screen without saving)*

CREATE

CANCEL



# Systems Knowledge

Within one application, Systems Knowledge combines the tools necessary to master cockpit familiarization, aircraft systems, general subjects, and FMS skills.

## Benefits:

- Self-paced Learning/Distance Learning
- Mastery of Aircraft Systems, General Subjects, and FMS
- Reduced in-house Training Costs
- Self-assessment and Testing Capabilities
- Learning Management System (LMS) with Administrative Access (Students Reports)
- Additional options can be added to Suite (ex. ACARS Trainer, Free-Play FMST)



Prepared. For Takeoff.

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