# Simulator Scenarios to Enhance Aircraft Safety

# HSAC Briefing - 2017

"The best safety device in any aircraft is a well-trained crew."





FlightSafety, International



#### **HSAC** Briefing

**OBJECTIVES** 

SCENARIO/LP DEVELOPMENT

**LOADING SCENARIOS/LP** 

**ACCESSING SCENARIOS** 

**HSAC SCENARIO** 

**LESSON PLAN** 

**INSTRUCTOR WORKLOAD** 

IOS COMPARISON

**HSAC DEMO** 

SUMMARY

**QUESTIONS** 

**OBJECTIVES** SCENARIO/LP DEVELOPMENT LOADING SCENARIOS/LP **ACCESSING SCENARIOS HSAC SCENARIO** LESSON PLAN INSTRUCTOR WORKLOAD IOS COMPARISON HSAC DEMO SUMMARY





### **OBJECTIVES**

#### **HSAC BRIEFING**

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SUMMARY

QUESTIONS

- Integrate SMS programs to enhance training reducing risk and improving standardization
- To introduce how the simulators can support customer specific training requirements to enhance safety
- To provide a brief discussion on the development, creation and loading of scenarios
- To provide background as to how various customers have used scenarios in training
- To discuss how the use of scenarios could reduce instructor workload, increase standardization and move instructor focus away from the IOS towards crew evaluation



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**QUESTIONS** 

# What is needed to develop a LP/Scenario

- Training Plan
- Visual Models
  - Airports/Pads
  - Platforms
  - Additional requirements such as traffic (LP)
- Weather
  - · All phases of flight
- Location
  - Placement of models
- Aircraft conditions (Lesson Plan Function)
  - GW
  - CG
  - Fuel/loading
  - Aircraft configuration
- Malfunction (Lesson Plan Function)
  - What
  - When
  - Were



### LOADING SCENARIOS/LESSON PLANS

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**SUMMARY** 

QUESTIONS

- Customer determines content & objectives
- FlightSafety Team supports building/testing
- Customer approves final product
  - Customer naming conventions
- Sim Techs save to training load
- Training load validation
- Changes during training are not saved
  - Reverts to saved scenario/lesson plan



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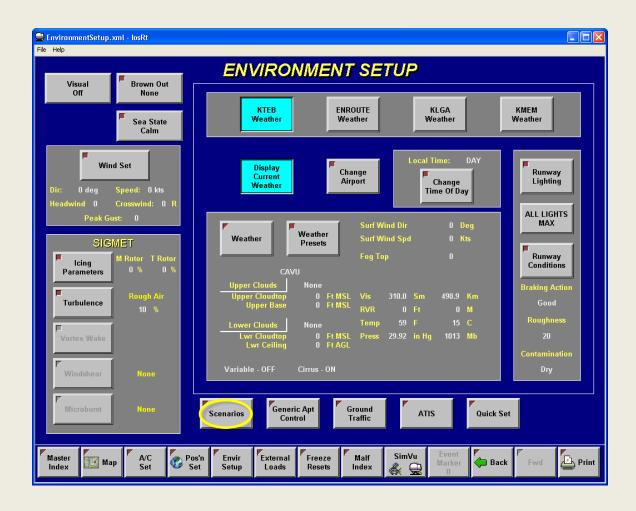
**IOS COMPARISON** 

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SUMMARY

**QUESTIONS** 

Selected from Environmental Page of IOS







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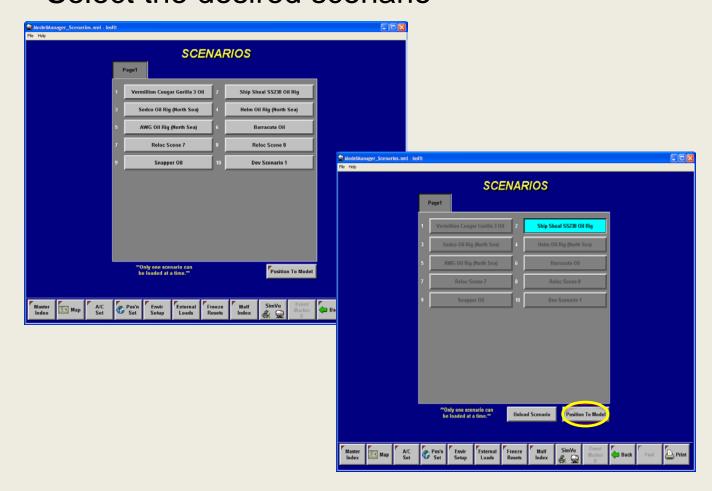
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**SUMMARY** 

**QUESTIONS** 

Select the desired scenario





# **ACESSING SCENARIOS**

#### **CENTER MEETING**

OUR VISION - OUR MISSION FINANCIAL HIGHLIGHTS

**PROGRAM STATUS** 

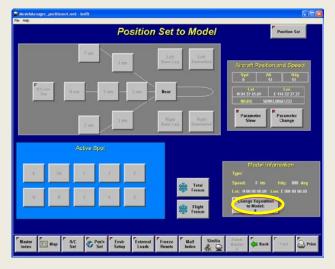
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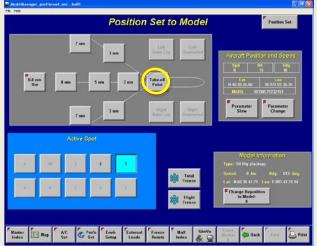
**FUTURE PLANNING** 

PERFORMANCE INDICATORS

AREAS OF EMPHASIS
QUESTIONS

Scenarios can be built such as the aircraft is placed in a specific location or the instructor can select any of the models placed in the scenario











## **ACESSING SCENARIOS**

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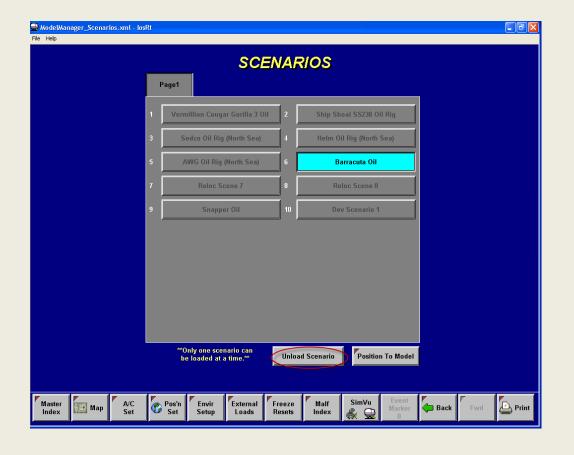
INSTRUCTOR WORKLOAD IOS COMPARISON

**HSAC DEMO** 

**SUMMARY** 

**QUESTIONS** 

When completed or moving to a new scenario select:
 UNLOAD SCENARIO and select new scenario



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# **HSAC SCENARIO**

#### HSAC BRIEFING

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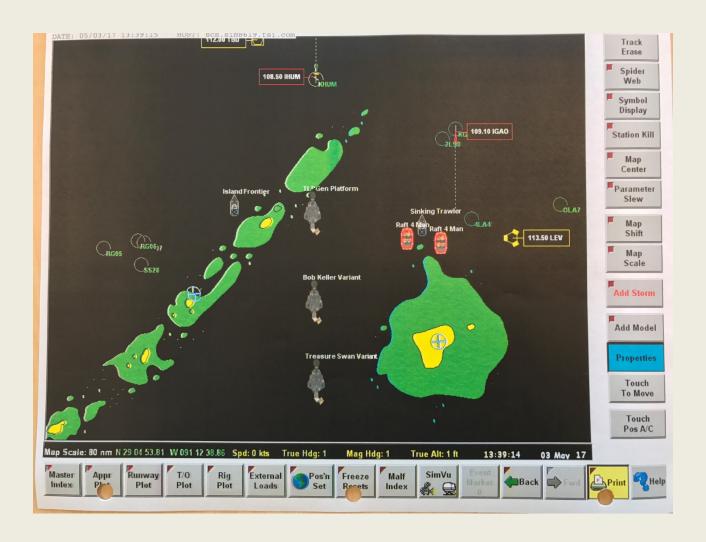
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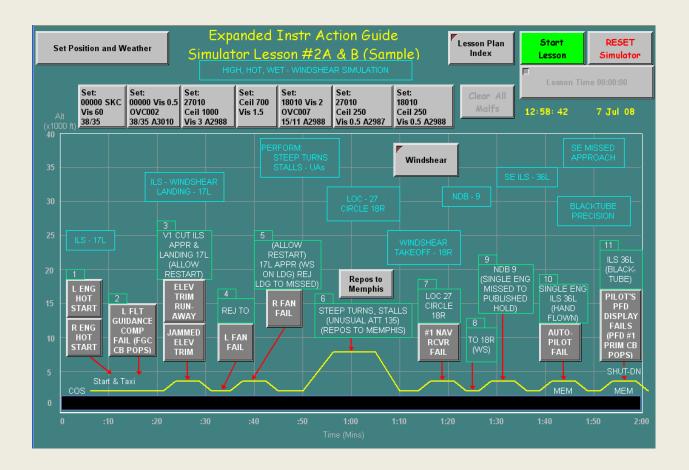
**LESSON PLAN** 

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QUESTIONS

# Specific Training





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QUESTIONS

- Fewer IOS selections to initiate training
- Fewer IOS selections during training
- Create scenario/LP to meet training objectives
- Simplifies IOS selections for complex actions
- Standardized instruction



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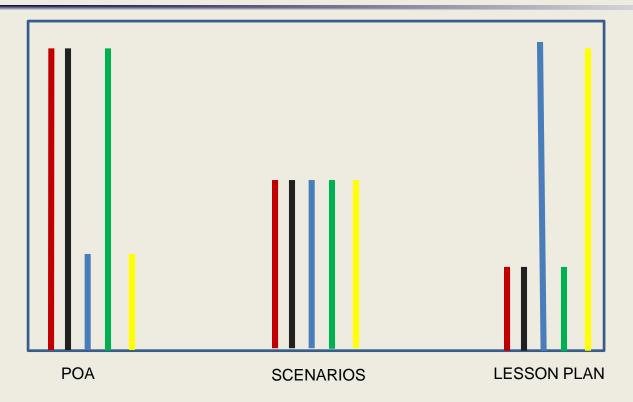
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# IOS COMPARISON



**REQUIRED IOS SKILLS**  WORK LOAD

STANDARDIZATION FREE PLAY MODIFICATIONS





# **HSAC DEMO**

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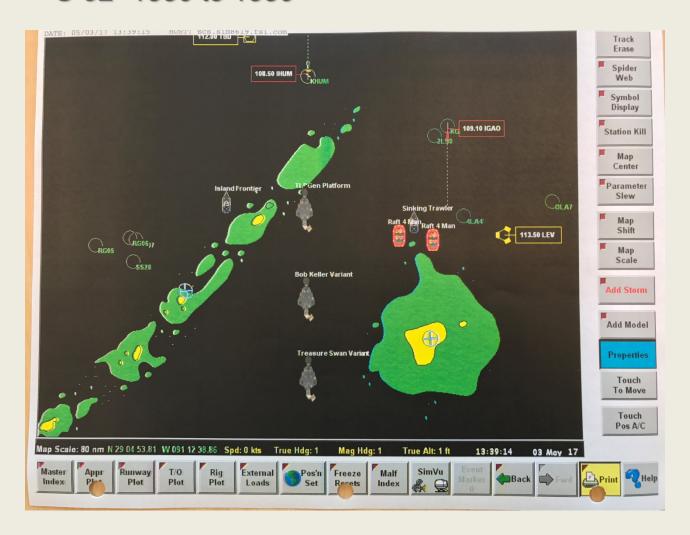
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### S-92 -1330 to 1530





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QUESTIONS

- Scenario/LP based training enhances learning improving aircraft safety
- Sim scenarios/LP are based on the operators training requirements
- Basic scenarios can be modified as need to support training
- Properly created scenarios/LP can reduce instructor workload, increase standardization and move instructor focus away from the IOS towards crew evaluation

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