





## About SIMCENTRE

Orient Flights' collaboration with ALSIM began in 2010 with the purchase of India's first ALSIM Simulator, the ALSIM AL50. ALSIM, based in France, is one of the leading Flight Simulator Manufactures in the World. ALSIM's constant process of evolving their products over the years has enabled them to offer customers with advanced aviation training devices.

The AL50 has been used by Orient Flights for imparting thousands of hours of training for Pilot's, Engineers & aviation enthusiasts. In 2018, Orient Flights added the advanced ALSIM AL250 Multi-Engine & Single-Engine Aircraft Simulator to its fleet, and have also entered into a technical partnership with ALSIM Simulators which led to the establishment of the SIMCENTRE at Chennai.

## SIMULATOR TRAINING

Simulator flying training is provided on two world-class simulators manufactured by ALSIM, France.

The ALSIM AL50 & ALSIM AL250 are advanced aviation training devices that are and in use all over the World



## ALSIM AL 250

The ALSIM AL250 is an Advanced Aviation Training Device and a product of over two decades of Alsim's design expertise, constant research and development, operational expertise and valuable customer input. The compact AL250 is configurable for single and twin engine aircraft and is EASA (FNPT II) & FAA (AATD) compliant.



### Highlights of ALSIM AL-250:

- ❖ Multi Engine Aircraft Configuration close to Piper Seneca and Piper Seminole
- ❖ Single Engine fixed and variable pitch aircraft configurations close to C172 and Piper Cherokee
- ❖ Has EFIS and Analogue instrumentation
- ❖ FAA approved Advanced Aviation Training Device (AATD)
- ❖ EASA Approved FNPT II
- ❖ Two seat configuration apart from an instructor station
- ❖ Simulates various weather conditions & emergency procedures
- ❖ DGCA approved Simulator



## ALSIM AL 50

The AL50's highly-refined design characteristics, offer an effective answer to the need for initial pilot training and for maintaining and developing pilot skills. The AL50 consists of the following main elements:

- ❖ Single-seater cabin with adjustable seat.
- ❖ Steering yoke with electric pitch adjustment.
- ❖ Rudder control pedals with toe brakes.
- ❖ Control panel with all instrumentation.
- ❖ Instructor's station PC
- ❖ Projected visual system

The canopy slides to the rear for easy access. The cockpit represents a single-pilot cockpit and features the characteristics of a single-engine (piston engine) airplane. Situated next to the cockpit, the instructor's station enables the instructor to conduct simulations with multiple software menus. The instructor can display and position the aircraft in flight, control weather conditions, simulate breakdowns and access pre-programmed flight sequences. The flight model mirrors the general characteristics of a single piston engine aircraft.

- ❖ FAA Certified BITD
- ❖ EASA Certified FNPT I

### ALSIM AL-50



### Highlights of ALSIM AL-50:

- ❖ C152 / C172 fixed pitch
- ❖ Socota TB20 variable pitch aircraft configuration
- ❖ Simulates various kinds of weather, emergencies and has database of Asian Airports
- ❖ Has Navigation aids such as ILS, VOR, NDF/ADF
- ❖ Equipped with transponder, DME
- ❖ FAA approved BITD
- ❖ EASA Approved FNPTI
- ❖ DGCA approved Simulator

## Ground Training:

Before getting into the cockpit, the trainee will be briefed on the following concepts:

- ❖ Aerodynamics of Flight
- ❖ Aircraft Construction
- ❖ Flight Controls
- ❖ Principles of Flight
- ❖ Flight Instruments
- ❖ Aircraft Systems

This would give the trainee the threshold knowledge required to begin flying training.

## Flying Training:

### Phase I: Ab-initio Flying Training

- ☐ Familiarization
- ☐ Taxiing
- ☐ Attitudes & Movements
- ☐ Straight & Level flight at varying airspeeds
- ☐ Climbing & Descending
- ☐ Turns: Gentle, Medium, and Steep
- ☐ Slow Flight & Stall
- ☐ Circuit Pattern

### Phase II: Instrument Flying Training

- ☐ Familiarization
- ☐ Introduction to
  - ❖ Instrument Landing System (ILS)
  - ❖ VHF Omni-Directional Range (VOR)
  - ❖ Non-Directional Beacon (NDB)
  - ❖ Automatic Direction Finder (ADF)
  - ❖ Distance Measuring Equipment (DME)
  - ❖ Transponder
  - ❖ RADAR: Primary & Secondary Surveillance Radar
  - ❖ Global Positioning System (GPS)
  - ❖ Precision & Non-precision approach procedures



# TRAINING PROGRAMMES

## Flight Training in ALSIM AL50 & ALSIM AL250 Simulators

### Professional Pilot Programme

#### Course 1: AS 0A1 (3 DAYS)

PILOTS – For PPL, CPL, IR, MER

- ❖ Single Engine Ab-initio flying training
- ❖ Multi Engine Ab-initio flying training
- ❖ Single Engine Instrument Flying training
- ❖ Multi Engine Instrument Flying training
- ❖ Emergency Procedure training

### Engineering Flying Programme

#### Course 3: AS 0A3

Aeronautical /Aerospace Engineering Students

- ❖ Taxiing and flying procedures
- ❖ Lift and Basic Aerodynamics
- ❖ Major Aircraft Components
- ❖ Types of Aircraft Construction
- ❖ Performance Instruments
- ❖ Control Instruments
- ❖ Analogue & Glass Cockpit familiarization
- ❖ Global Positioning System (GPS)
- ❖ Basic Principles of Flight
- ❖ Aerodynamics of Flight

### At ORIENT Flights Mysore

- ❖ Basics on Aircraft Systems
- ❖ Primary Flight Controls
- ❖ Secondary Flight Controls
- ❖ Aircraft Performance
- ❖ Basic Auto Pilot Operation
- ❖ Navigational Instruments such as ILS, VOR, NDB/ADF
- ❖ Primary and Secondary Surveillance Radar
- ❖ Distance Measuring Equipment
- ❖ Transponder

### ALSIM'S Engineering Pack

- ❖ Create custom concept instrument display designs
- ❖ Create and inject custom errors
- ❖ Extract flight data parameters
- ❖ Integrate pilot monitoring systems
- ❖ Support research trials easily

### Maintenance Programme

MAINTENANCE PROGRAMME

#### Course 2: AS 0A2 (3 DAYS)

AIRCRAFT MAINTENANCE ENGINEERING

- ❖ Aircraft instruments
- ❖ Automatic direction finder (ADF)
- ❖ Very high frequency (VHF)
- ❖ VHF Omni range (VOR)
- ❖ Instrument landing system (ILS)
- ❖ Air traffic control (ATC)
- ❖ Emergency locator transmitter (ELT)
- ❖ Distance measuring equipment's (DME)

### Aviation Familiarization Programme

Course 4: AS 0A4 (1/5 DAYS) Advance Package  
School Students

#### Flying Training:

- ❖ Familiarization Programme
- ❖ Taxiing

#### Instrument Flying Training

- ❖ Familiarization
- ❖ Introduction to
- ❖ Instrument Landing System (ILS)
- ❖ VHF Omni-Directional Range (VOR)
- ❖ Non-Directional Beacon (NDB)
- ❖ Automatic Direction Finder (ADF)
- ❖ Distance Measuring Equipment (DME)
- ❖ RADAR: Primary & Secondary Surveillance Radar
- ❖ Global Positioning System (GPS)

## Aviation Professional Programme

### Course 5: AS 0A5 (3 DAYS)

INDUSTRY PROFESSIONALS & AVIATION FACULTY

- ❖ EFIS familiarization
- ❖ Adverse weather impact procedures
- ❖ Emergency response optimization
- ❖ Taxiing and flying procedures
- ❖ Analogue & Glass Cockpit familiarization
- ❖ Global Positioning System (GPS)
- ❖ Basic Auto Pilot Operation
- ❖ Navigational Instruments such as ILS, VOR, NDB/ADF
- ❖ Primary and Secondary Surveillance Radar
- ❖ Distance Measuring Equipment
- ❖ Transponder

### ALSIM'S Engineering Pack

- ❖ Create custom concept instrument display designs
- ❖ Create and inject custom errors
- ❖ Extract flight data parameters
- ❖ Integrate pilot monitoring systems

## 3 Day Aviation Technical Training Program

### Course 6: AS 0A6

FOR EXCHANGE STUDENTS

#### DAY 1

##### SIM Centre Training

- ❖ Aircraft familiarization
- ❖ Flying Procedures
- ❖ Aircraft instruments
- ❖ Automatic direction finder (ADF)
- ❖ Very high frequency (VHF)
- ❖ VHF Omni range (VOR)
- ❖ Instrument landing system (ILS)
- ❖ Air traffic control (ATC)
- ❖ Emergency locator transmitter (ELT)
- ❖ Distance measuring equipment's (DME)

### ALSIM'S Engineering Pack

- ❖ Create custom concept instrument display designs
- ❖ Create and inject custom errors
- ❖ Extract flight data parameters
- ❖ Integrate pilot monitoring systems

#### DAY 2

##### Live Aircraft Maintenance Training

#### DAY 3

##### Aeromodelling Workshop

*\* Extra flying hours on charge basis. Contact coordinator for details*

### Terms and Condition:

1. Fees once remitted will not be refunded under any circumstances.
2. Class timing should be strictly adhered to.
3. Attendance for all classes is mandatory.
4. Dress code – Uniform as required for the Course.
5. We reserve the right to modify, cancel and limit any training or promotion.
6. Any violation of stipulated rules and regulations will be met with strict disciplinary action.
7. Accommodation (on/off campus) can be arranged on payment basis.

### For Training Enquiry Contact:

#### Capt.Bharat Suryanarayanan

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bharath@orientflights.com

#### Ms.Deepa Ramesh

Mobile No: +91-9840674747

admissions@orientflights.com





## Flight Training on ALSIM AL50 & ALSIM AL250 Simulators

(Use copies as required)

### REGISTRATION FORM

Name (In capital letter) : .....

Designation : .....

Professionals / Students : .....

Organization : .....

Address : .....

.....

.....

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Phone (Off) : ..... Phone (Res) : .....

Mobile : ..... E-Mail : .....

### Course Details :

☐ AS 0A1   ☐ AS 0A2   ☐ AS 0A3   ☐ AS 0A4   ☐ AS 0A5   ☐ AS 0A6

Bank and Branch : .....

Registration Fee : ..... (Rs.)

Accommodation : ☐ Required   ☐ Not Required

Type of Room : ☐ Standard   ☐ Deluxe   ☐ AC

Date: .....

Signature: .....

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### Office Use

☐ AS 0A1   ☐ AS 0A2   ☐ AS 0A3   ☐ AS 0A4   ☐ AS 0A5   ☐ AS 0A6

Remarks by coordinator

Fee Paid

Accounts Dept:

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Manager Admissions

DGM (Accounts & Admin)

CEO





### Registered Office:

1/40 – 9, Mount Poonamallee Road,  
St.Thomas Mount, Chennai – 600016  
TamilNadu, India  
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