

# MakaiLay Level 1 Training Course

15th June 2015



MAKAI OCEAN ENGINEERING  
*The Future of Ocean Innovation*  
[www.makai.com](http://www.makai.com)

**Ocean-Tec Systems**  
Systems Engineering Solutions  
[www.ocean-tec.co.uk](http://www.ocean-tec.co.uk)

## 1. Overview

Makai perform training direct in Hawaii and within the UK via Ocean-Tec Systems, who are the European Agents for the Makai suite of products.

Makai operate a structured training program which allows employers to ascertain what skills any particular Makai operator has obtained. The system splits personnel into 3 distinct levels;

### 1.1. Level 1 – MakaiLay Trainee

An operator who has successfully completed level 1 classroom training for the MakaiLay Submarine Cable Installation Software (5-day training), but has limited, or no, at-sea MakaiLay operational experience.

### 1.2. Level 2 – Standard MakaiLay Operator

A Standard Operator must have the following qualifications:

- Successfully completed MakaiLay Level 1 classroom training,
- A minimum of 6 weeks of at-sea MakaiLay operational experience, under the supervision of a standard/Advanced MakaiLay Operator,
- Successfully completed a 3-day MakaiLay Level 2 operations course.
- Passed the MakaiLay Level 2 operator test.
- Standard MakaiLay Operators are capable of independently operating MakaiLay, transferring the data to the Engineer in Charge (EIC), and assisting the EIC in interpretation of the data.

### 1.3. Level 3 – Advanced MakaiLay Operator

An Advanced Operator must have the following qualifications:

- Successfully completed MakaiLay Level 2 classroom training and Test.
- A minimum of 6 months of at-sea MakaiLay operational experience.
- A Minimum of two MakaiLay installations/commissioning projects.
- Successfully completed a 3-day Level 3 MakaiLay operations and troubleshooting course.
- Passed the MakaiLay Level 3 operator test.

Advanced MakaiLay Operators are capable of operating MakaiLay, interpreting the results, and supporting the project team in making changes to the cable lay parameters in order to maintain quality cable installations.



## 2. MakaiLay Level I Training Course

The purpose of this five (5) day training course is to provide a comprehensive understanding of the MakaiPlan, MakaiPlan Pro and MakaiLay software including specific topics in MakaiPlan which are applicable to MakaiLay.

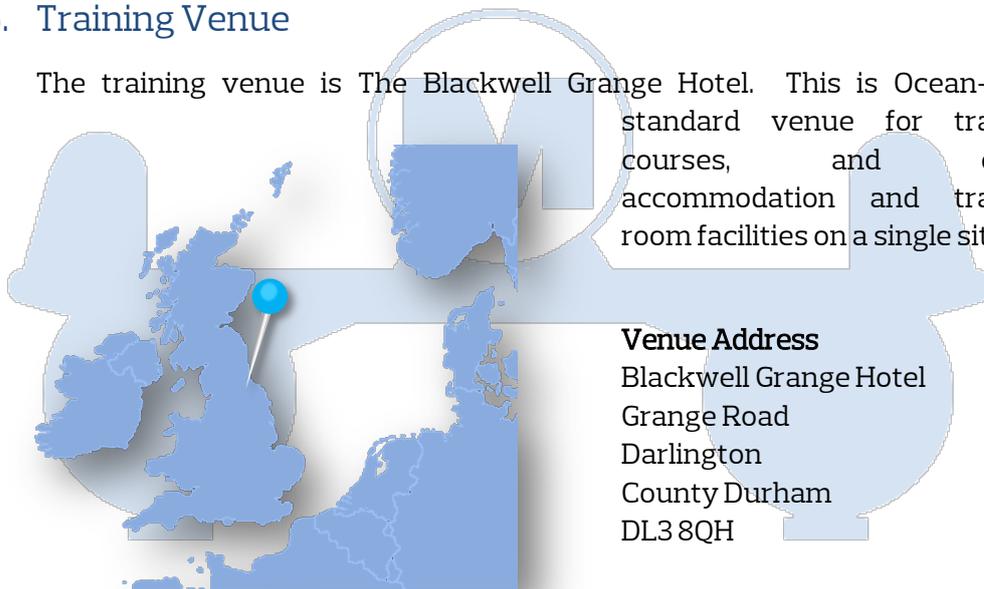
The course covers route planning, cable lay physics, and cable installation. Additional course topics include data analysis, file I/O and troubleshooting (some of these topics may be modified to better fit the needs of the attendees).

### 1.4. About the Trainer

Training will be provided by one of Makai's experienced personnel, heavily experienced in the use of the application during both planning and cable lay activities.

### 1.5. Training Venue

The training venue is The Blackwell Grange Hotel. This is Ocean-Tec's standard venue for training courses, and offers accommodation and training room facilities on a single site.



### 3. Course Overview

The following outlines the planned activities for each day of the course. Dependent upon the specific requirements of the delegates the sequence may be amended to accommodate specific requests.

An overview of the entire process, from using MakaiPlan to perform data importing, RPL generation, installation planning leading to the use of MakaiLay as a simple logging and monitoring system then as a full lay control system.

The trainer will attempt to address any additional questions or topics of specific interest for the delegates on the fly during the course.

Should delegates have any items of specific interest which they hope the course will address then advance notification of these allows the Trainer time to incorporate these into the course.



#### Setup, Introduction, Cable Lay Concepts and Route Planning

- Setup
- Plan view
- Importing Data and Features
- Cable and Body Databases
- Path and Cable Assembly
- Profile Data
- Flexible vs. Fixed Mode Edition
- Different Point Types
- Planning Tools
- Creating RPL



#### Route Planning, Cable Physics, Ship Plans and Simulations

- Finish RPL Design
- Cable Physics (Bottom Tension, Bodies, Turns, etc.)
- Cable Model
- Creating a Ship Plan
- Creating a Workspace
- Starting a Simulation
- Run Simulation



#### Cable Lay Simulations, Installation Planning and Look-Ahead

- Continue Workspace creating and Running Simulation
- Monitoring the simulations results
- Modifying Ship Instructions
- SPL vs. Ship Instruction Set
- Introduction to Look-ahead
- SPL refinement





#### Look-ahead, Results and Monitoring, Forms, Advanced Simulations

- Continue with Look-Ahead
- Editing the Ship Plan for turns
- Simulations
- ML Query
- More Simulations.....
- Simulation Expert!



#### Troubleshooting Models, Recap and Summary

- Trouble Shooting Methods
- Finish Simulations...
- MakaiPlan Pro vs. MakaiLay
- Summary and Recap

## 4. What is included within the course

The following outlines what is included within the course;

- 5 Day training course conducted by a Certified Makai Trainer from Hawaii
- All required IT equipment
- All course materials (some maybe supplied in digital format)
- 2 Course Lunch in the Havelock Restaurant
- 5 Nights Accommodation (Bed & Breakfast) at Grange Hotel
- Evening Meal
- Snacks and Refreshments throughout the day
- Makai Training Certificate issued on completion of the course.
- Registration within the Makai Certified User database.

### 1.6. Course Dates

The training course will be conducted between 15th June 2015 to 19th June 2015 inclusive.

Training will commence at 09:00 and finish at 17:00 each day, with the exception of the last day when training will conclude at 15:30 to allow delegates to depart for their return home.



## 5. FAQs

The following Frequently Asked Questions are included to address the majority of queries we receive;

- **Do I need to bring a PC?** For the MakaiPlan Level 1 training course all IT Equipment will be provided.
- **Will there be a Test?** There are various assessment exercises during the course to allow the Trainer to assess the learning of the delegate.
- **Is Lunch Provided?** Yes, lunch, refreshments and snacks at breaktimes are all included in the cost.
- **I'm a Vegetarian, is this an issue?** No, let us know at the time of booking and we will provide a vegetarian lunch.
- **What is included in the Accommodation?** The accommodation includes Bed & Breakfast together with free Wifi (Wifi code to be requested upon checkin).
- **How do I pay for my course?** Payments are to be made prior to course commencement; we accept payments with debit/credit card via Paypal. If you are unable to pay by this method kindly contact us to discuss further options.
- **Do you accept delegates from overseas?** Yes, however delegates from non-EU countries may require a visa to enter the UK. Please check you are eligible for a visa before booking a course as refunds cannot be given for visa issues.
- **Do I need to purchase/bring any training materials?** For the MakaiPlan Level 1 training course all training materials are provided.
- **Where is the Nearest Airport?** The nearest airport is Durham Tees Valley (MME) with regular flights to/from Schiphol, and is approximately a 10-15 minute drive.  
  
The next nearest is Newcastle International Airport, this is approximately 1-1.5hrs away depending upon traffic.
- **Which 5 days does the accommodation cover?** The 5 evenings accommodation is booked for delegates to arrive the evening before the course begins, and to check-out on the last day of the course.
- **Can I extend my stay after the course?** Accommodation duration can be extended using our discounted rates at an additional cost. If you would like to extend your stay please advise at time of booking.
- **Does the Venue have WiFi?** Free Wifi is available throughout the venue, a code will be required to gain access, this can be requested from reception.
- **What language is used in the course delivery?** All Ocean-Tec Training is conducted in the English language.
- **Is there help available to pay for courses?** Ocean-Tec do not offer any kind of bursary fund. There may be governmental bursary schemes to assist with training, however we are not able to advise on any in particular.
- **What certification/qualifications do I get?** As this course is performed by a Makai Ocean Engineering certified trainer, on successful completion of the course you will be issued with a MakaiLay Level 1



training certificate and entered into the Makai training database as a trained user.

## 6. Prices

Training Package	Price (Ex VAT)
MakaiLay Level1 Course (5 Days)	£7,250

### Notes:

- All prices are in Pounds Sterling and are exclusive of VAT.
- All reservations are made by completion of an Ocean-Tec Systems booking form, which forms a binding contract of payment for training.
- Ocean-Tec operates its Makai courses on a 'sufficient interest' basis such that if there are not sufficient delegates for the course to be viable, the course may be cancelled/rescheduled. Our 'Go/No Go' date for this course is the 24th May 2015, if sufficient interest is not present Ocean-Tec will advise within 3 days if the course is to be rescheduled or cancelled.
- Cancellation by Delegate:  
Our training courses are carefully priced to ensure that we provide a service that is accessible to all. Our training programme is restricted to a specified number of delegates per course. Cancellations, have a significant impact to the overall financial performance of the Ocean-Tec training department, therefore liability for fees remains with the delegate/their employer (depending who books the course).
  - Substitution of delegates for alternative delegates is allowed at no additional cost, however delivery of certificates may be delayed..
  - Should Cancellation occur prior to go/no go date above – a full refund will be issued.
  - After go/no go date Ocean-Tec will re-advertise the delegates space on course and should Ocean-Tec be successful in finding a replacement delegate, a refund equal to the amount obtained from the replacement delegate will be refunded (less an administrative fee and any taxes applicable). No other form of refund will be applicable.
- Full Ocean-Tec Training terms and conditions are available upon request.

## 7. What to Do Next?

To book a delegate space on the training course follow the steps below;

1. Complete the supplied booking form and return by email or Fax to;



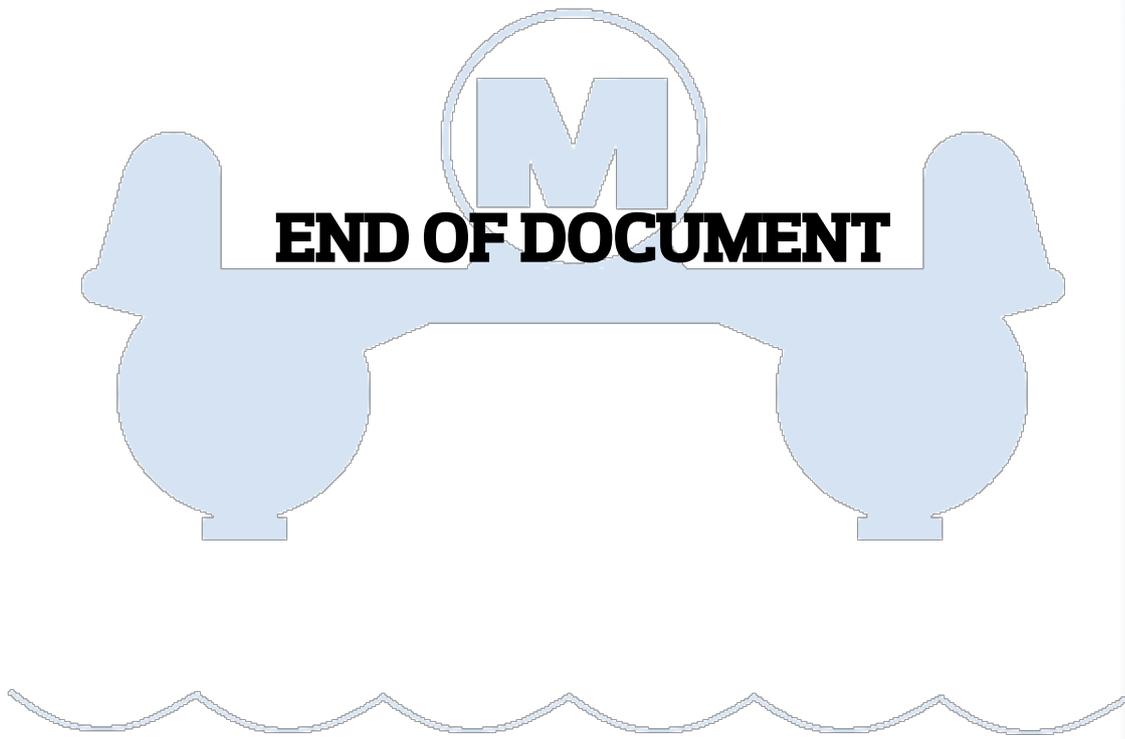
[training@ocean-tec.co.uk](mailto:training@ocean-tec.co.uk)



+44 845 094 6039

2. A representative from Ocean-Tec will confirm receipt of your booking request and issue by email a request for payment. Ocean-Tec use **PayPal** to receive payments for training. **PayPal** accept both Debit and Credit card payment, regardless of the user having a **PayPal** account or not.
3. Joining instructions will be issued together with confirmation of payment receipt. At this point the delegate space is now confirmed.





**END OF DOCUMENT**



**Ocean-Tec Systems**  
Systems Engineering Solutions  
[www.ocean-tec.co.uk](http://www.ocean-tec.co.uk)

**MakilaY Training**