



CONTINUING EDUCATION AND  
TRAINING SERIES

# Aircraft Electrical Load Analysis (ELA)

*This 2-day course provides essential ELA knowledge and skills to ensure participants understand the mathematics, regulations and process behind ELA management. This unique course is intended for aircraft technical support staff and individuals involved with aircraft modifications, repairs and airworthiness compliance. The course aims to explain ELA terminology, aircraft electrical basics, and ELA associated regulations. ELA spreadsheets are analysed and updated. Incident case studies and practical examples are studied.*

Thursday 24<sup>th</sup> — Friday 25<sup>th</sup> October 2019  
9:00am—5:00pm

Venue:  
MEMKO - L4, 455 Bourke Street, Melbourne,  
VIC 3000, Australia



Course managed by MEMKO Aviation, Aerospace and Defence,  
Pty Ltd, ABN 73 619 452 470

# COURSE REGISTRATION

Aircraft Electrical Load Analysis (ELA)

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**Registrations close Friday 11th October 2019**

Email or fax this form with your payment details to:

MEMKO Aviation, Aerospace and Defence Pty Ltd  
Fax: 03 8080 1645  
Email: [training@memko.com.au](mailto:training@memko.com.au)

## Payment Method:

- I enclose cheque (\$1,650) payable to MEMKO AAD Pty Ltd  
 Bank transfer (\$1,650) to MEMKO P/L BSB 033-060 Ac 437512  
 Charge my credit card:

Visa  MasterCard  Amex Amount: \$ 1,650

Number: \_\_\_\_\_ CVC: \_\_\_\_\_

Card expiry: \_\_ / \_\_ Cardholder Name: \_\_\_\_\_

**Cardholder's Signature:** \_\_\_\_\_

For further info, please contact MEMKO on 03-8605 7777 or [training@memko.com.au](mailto:training@memko.com.au)  
Tax invoices/receipts will be emailed to above email address.

## COURSE OUTLINE

- The learning activities are face-to-face lectures with embedded quizzes and class discussion.
- An ELA will be analysed and updated in an interactive practical session.
- Assessment consists of a short quiz following each learning module.
- The course is arranged as a series of 4 modules over 2 days as follows:
  - 1) ELA introduction and electrical basics, ELA purpose and construction. Airworthiness regulations.
  - 2) Aircraft systems and aircraft electrical buss design.
  - 3) ELA practical exercises. ELA control and update process.
  - 4) Critical electrical issues, power isolation, AD's and case studies.

## COURSE OUTCOMES

- An understanding of the aircraft electrical supply and demand systems.
- An understanding of the requirements of the aircraft electrical design standards and regulatory compliance.
- An understanding of how to develop an aircraft ELA report.
- Ability to utilise an existing ELA in support of approving modifications involving aircraft avionics and electrics.
- Ability to maintain the ELA and incorporate ongoing modifications through the life of the aircraft.



## COURSE LECTURER

### Mr Wayne Sykes Electrical Engineer

Wayne Sykes holds a BE (Electrical and Electronic Engineering) from Victoria University. His career spans more than 40 years commencing employment in a design and development role at government Aircraft Factories working on both aircraft and remote piloted vehicles. He has worked in both Defence and Private industry with his work ranging from Defence, projects such as Nulka, Military Nomad, JORN and Parare through to private industry with projects including Train Control and Road Tolling Systems.

In 1998 he was selected to work with E-Systems/Raytheon in Greenville TX on the wedgetail bid designed around an Airbus A310.

His work has included design, certification, customer acceptance, integration, electrical load analysis and Verification and Validation, with levels of responsibility varying from design engineer through to systems engineer, project lead engineer, design authority and team manager.

## COURSE ACCREDITATION

All participants will receive a certificate of completion after full attendance of the course.

## COURSE FEES

Fee for this 2 day course is \$1,500 plus GST. This includes course notes, morning and afternoon tea/coffee and lunches.

MEMKO Aviation, Aerospace and Defence Pty Ltd reserves the right to cancel the course, in which case participants will be notified and the course fee will be returned, in full. Course fees will be returned less a \$50 administration fee, upon receipt of a written cancellation notice before Friday 11th October 2019. **Places are limited.**