

## 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.

Tuesday 16<sup>th</sup> to Wednesday 17<sup>th</sup> of April 2025 9:00am—5:00pm

Venue:
MEMKO - L28, 303 Collins 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)

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Name:	
Company:	
Address:	
Telephone: Fax:	
E-mail:	
Registrations close Friday 4th of April 2025	
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	
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	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 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 John Taylor

Principal Avionics Engineer

John has over 35 years experience in aircraft modification, systems engineering, certification and support, including as a design signatory for military and civil aircraft work (EASA CS 25 / CAR 35 / CASR 21J / RAAF TAMM / DASR 21J and similar). This has included work on modifications for various FAA and EASA STCs, and certification of aircraft modifications, both military and civil.

John's professional areas of interest include avionics design, certification, systems safety, systems engineering, and aspects of verification and validation including ground and flight test. Project Management, Requirements Management, and Systems Engineering skills have been expanded through 30 years of practical use in aerospace industry projects.

#### 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  $4^{th}$  April 2025.

Places are limited.

Please note the course notes will be delivered in an eBook format. iPads will be provided to access the material. Participants are welcome to bring their own laptops.