

Introduction to UAV: Missions, Links and Payloads

18–19 February 2008

Presenter: Mr Dave Adamy

Room 1-05, Mawson Centre,
Mawson Lakes SA

Teaching Arrangements:

The course will be conducted from 9.00am to 5.00pm. Morning tea will be available at approximately 10.00am to 10.30am, lunch from 12.30pm to 1.30pm and afternoon tea at approximately 3.00pm to 3.30pm.

Registration Fee:
AU\$1320 (including GST)

Each participant will receive a complimentary copy of "Practical Communication Theory" by D. Adamy.

Group and PhD student discounts available. Please enquire.

How to Register

To register fill out the registration form (overleaf) and fax it to +61-8-8302-3115 or scan and email it to industryeducation@nicta.com.au.

Cancellation Policy

At least **4 weeks** notice is required for cancellation of a place in a short course for full reimbursement. If cancellation is later than 4 weeks then the place can either be given to another person or the registrant can be provided with a credit towards other NICTA training.

For details of further courses please see our web site:
www.nicta.com.au/short_courses
or contact the NICTA Industry Education Manager.

About *Introduction to Unmanned Aerial Vehicles: Missions, Links and Payloads*

This is a practical course which covers technical requirements for all UAV command and data links, and the requirements which various types of payloads place on command and data links. Attendees will learn to calculate link throughput performance and the data rates associated with each type of payload in typical missions.

The main point of the course is the flow of requirements from the mission through the payload, through the link to the user. Attendees will learn to make the important calculations for each step of the process.

Prerequisites

Only a general technical background and basic Algebra is required.

Target Audience

Technical, management and operational professionals with responsibility for the selection, design and operation of UAVs, UAV links, and UAV payloads for any military or civil application.

Brief Course Outline and Subject Schedule

Link and payload specifications; Command Links, Data Links, Broadcast links, Relay links; Imagery, IRLS, SAR, MTI, Laser designator, Jamming and Electronic reconnaissance payloads.

| | | |
|--------------|--------------|--------------------------------|
| Day 1 | Section 1 | Introduction, UAVs, Missions |
| | Sections 2–3 | Link design |
| | Section 4 | Payloads |
| Day 2 | Sections 1–2 | Imagery Payloads |
| | Section 3 | Radar and IR Payloads |
| | Section 4 | EW and Reconnaissance Payloads |

Course Texts:

Practical Communication Theory (by the presenter), course notes with copies of visual aids, antenna/propagation slide rule.

About the Presenter: Mr. Dave Adamy

Dave Adamy is an internationally recognized expert in electronic warfare who writes the popular monthly EW-101 column in the JED. He has over 40 years experience as a systems engineer and program technical director, developing EW systems from DC to Light, deployed on platforms from submarines to space, with specifications from QRC to high reliability. He was principle investigator on two link/payload studies for the UAV JPO. He has published over 150 professional articles on Electronic Warfare, receiver system design and closely related subjects. He holds an MSEE (Communication theory) and has ten books in print.

About NICTA and Short Course Program

National ICT Australia (NICTA) is Australia's ICT Centre of Excellence and was established to drive innovation through high quality research, research training and technology transfer. As a world-class research institute NICTA uniquely combines excellence in research, education, commercialisation and collaboration. We are working to ensure that Australia is well placed to benefit from the significant opportunities that ICT research delivers.

NICTA is funded by the Australian Government as represented by the Department of Communications, Information Technology and the Arts and the Australian Research Council through *Backing Australia's Ability* and the ICT Centre of Excellence program. NICTA members are the Australian Capital Territory Government, the New South Wales Government, the University of New South Wales and the Australian National University.

NICTA short courses offer scientists, engineers and managers technical training with a leading edge in areas such as telecommunications, transport, security, defence, logistics, e-government, mining, finance and biotechnology.

There will be ample opportunities for discussion and questions and answers. Morning and afternoon tea/coffee and a light lunch will be provided. Extensive workshop materials will be made available to participants.

How to register

Please complete the registration form below and

- Fax it to +61-8-8302-3115 or
- Scan and email it to industryeducation@nicta.com.au.

Send the form as soon as possible to secure your place.

For further information please contact
Anne-Marie Eliseo
Industry Education Manager
Telephone: +61-8-8302-3928
Email: anne-marie.eliseo@nicta.com.au

Registration Form and Tax Invoice* ABN 62 102 206 173

*Upon completion of this form, including the relevant payment, this form will become a Tax Invoice.

Please register me for Introduction to UAV: Missions, Links and Payloads on 18-19 February 2008.

PLEASE PRINT

Date: _____

Title: _____ First Name: _____ Surname: _____

Position: _____ Organisation/Division: _____

Postal Address: _____

Telephone No: _____ Facsimile No: _____ Email: _____

Dietary preference: _____

Course Fees: Full fee: AU\$1320 (incl. GST)
(Register before **Feb 4th, 2008.**)

Method of Payment (please tick below):

Cheque (payable to National ICT Australia Ltd)
Forward the cheque and a copy of THIS registration form to:
Anne-Marie Eliseo, Industry Education Manager, NICTA, SPRI Bld, Mawson Lakes Boulevard, Mawson Lakes SA 5095, Australia.

Credit Card: Credit Card No.: _____ Expiry Date: _____

Visa Master Card Name on card: _____

Amount: AU\$ _____ Signature: _____ Tick if receipt required

Email address of card holder: _____

Electronic Funds Transfer
Please advise by email to Annette Van Bramer
annette.vanbramer@nicta.com.au
when payment is made

| | |
|------------------|--------------------------------|
| BANK | Commonwealth Bank of Australia |
| ACCOUNT NAME | National ICT Australia Limited |
| BSB | 062 900 |
| ACCOUNT NUMBER | 1032 4576 |
| REFERENCE NUMBER | 1802UAV |

FAX the form to +61-8-8302 3115 or EMAIL it to industryeducation@nicta.com.au

Privacy Clause: The above information is being collected by NICTA and will be added to our contact database and will be used primarily to provide you with further information about NICTA events and services. All information is collected, used or disclosed subject to NICTA's Privacy Policy which can be accessed at http://nicta.com.au/about/nicta_website/privacy. Please tick the box below if you do NOT wish to receive any further mailings from NICTA.

I do not wish to receive any further mailings from NICTA

You can use the following options to access or remove your personal information from NICTA's databases, make a complaint about a breach of privacy or if you have a query relating to NICTA's privacy practices and policies:

- Send an email to comments@nicta.com.au or
- Phone NICTA's Industry Education Manager on +61 8 8302 3928.