



'A/STTTUTt<sup>0</sup>\*



Volume 80  
Number 7  
July 2012  
ISSN 0002-6859

## The Journal of the Wireless Institute of Australia

### Editorial

#### Editor

Peter Freeman VK3PF  
editor@wia.org.au

#### Technical Editor

Peter Gibson VK3AZL

#### Publications committee

Don Jackson VK3DBB  
Evan Jarman VK3ANI  
Bill Roper VK3BR  
Ewen Templeton VK30W  
Ernie Walls VK3FM  
Greg Williams VK3VT

#### All circulation matters

nationaloffice@wia.org.au

#### How to submit material

Secretary  
AR Publications Committee  
PO Box 2042  
BAYSWATERVIC 3153  
or armag@wia.org.au

#### Letters to Editor

Editor AR Magazine  
PO Box 273  
Churchill Vic 3842  
or editor@wia.org.au

#### Hamads

'Hamads'  
PO Box 2042  
BAYSWATERVIC 3153  
hamads@wia.org.au

#### Advertising

All enquiries to  
Advertising Manager  
AR Publications Committee  
PO Box 2042  
BAYSWATERVIC 3153  
or admanager@wia.org.au

#### Registered Office

Unit 20 11 -13 Havelock Road  
BAYSWATERVIC 3153  
Australia  
Phone: 03 9729 0400  
Fax: 03 9729 7325

#### Production Deadlines

All articles, columns, hamads and  
advertising booking by **first day of  
previous month.**

The contents of Amateur Radio are Copyright  
Wireless Institute of Australia © 2012

### General

WICEN (Vic) Communications at the  
Arthurs Seat Challenge

Paul Whitaker VK30PW

Report on the WIA Annual  
Conference Mildura

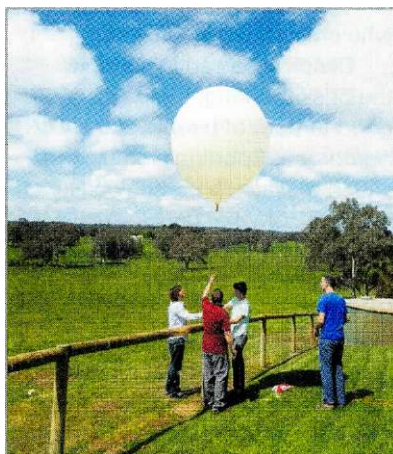
Onno Benschop VK6FLAB

The SCRC (VK3KID) play the  
VK/trans-Tasman 80 metre phone  
contest

Michael Romanov VK3CMV

VK4ILH Cape Moreton Lighthouse  
AU0009, Moreton island IOTA OC-137,  
ILLW2012

A squid pole antenna mast



This month's cover

Horus 8 launch with Terry VK5VZI, Chris VK5CP,  
Joel Stanley and Alan Kovacs at the QTH of Graham  
VK5GH. See the story of Project Horus commencing  
on page 22. Photo by Scott Testi VK5TST.

### Contributions to Amateur Radio



Vt  
A A A  
) 3  
, IJUTt

Information on house style is available from the Editor.

### Technical

Introducing Project Horus: 22  
High altitude ballooning in South  
Australia

Grant Willis VK5GR, Matthew Cook VK5ZM,  
Mark Jessop VK5QI and Alan Kovacs

Magnetic loop for HF 34  
pedestrian mobile  
Peter Parker VK3YE

Review: The Icom ID-31A 70 cm 44  
handheld transceiver

Peter Freeman VK3PF, Michael Carey VK5ZEA

A transceiver control and audio 49  
interface using USB components  
Dale Hughes VK1DSH

### Columns

ALARA 60

AMSAT 56

Contests 17,19

DX - News & Views 42

Editorial 2, 6

Hamads 62,63

Over to You 14,53

Silent Key 14, 20,48, 53, 59

Spotlight On SWLing

VHF/UHF - An Expanding World 39

WIA Comment 3,5

WIA News 4,5

News from:

VK2 54

VK3 12,15

VK5 21

VK7 13

#### Back Issues

Back issues are available directly from the WIA National Office  
(until stocks are exhausted), at \$8.00 each (including postage  
within Australia) to members

#### Photostat copies

If back issues are unavailable, photocopies of articles are  
available to members at \$2.50 each (plus an additional \$2 for  
each additional issue in which the article appears).

#### Disclaimer

The opinions expressed in this publication do not necessarily  
reflect the official view of the WIA and the WIA cannot be held  
responsible for incorrect information published.