



Western Suburbs Radio Club Inc.

August 2004 Newsletter

ZL1AC, Branch 03 NZART 3000 Great North Road New Lynn, PO Box 15-122, New Lynn.

President: James Moore ZL1JYM, Secretary: Merv Thomas ZL1SK

Newsletter Editor – John Neill ZL1NE

VHF Club Net Wednesday 07:30 146.525 MHz, HF Club Net Fridays 07:30 3.623 MHz

Website <http://www.gsl.net/zl1ac>

Club Calendar

Monday	9 th	August	Dinner at the Avondale RSA. 5:30pm on.
Monday	24 th	August	Committee Meeting - (Please Confirm Date.)
Saturday		November	Used Equipment Sale - (Date to be confirmed.)

Club Evening 12th July 2004 WSRC Mid Winter Dinner

The tables have been booked at the Avondale RSA for **Monday the 9th August**. Dinner is available from 5.30 to 8 pm, Barry and Alice will be there before 5 so come earlier if you wish. We had a great turn out last year and had to get extra tables so come and enjoy the fun and take the XYL out for drinks and dinner. And of course there is the pokies and dancing. Cost \$6-00 per person

July Club Evening

Tony Case, ZL1UD, NZART Northern Region Councillor spoke to the club at our July. Tony spoke positively of the developments in Ham Radio. Topics of interest was the change in the Licensing system following the removal of Morse Code as an examination requirement, the delay in producing the Call Book for this year as a result of so many "T" calls deciding to choose new calls and the reasons behind the NZART HQ relocation. We enjoyed Tony's company and talk. There was a raffle at the end of the meeting and a few dollars was raised for club funds as a result. We now have two proud new owners of Transistor Radios, and two safe owners of smoke alarms.

Club Fees Final Reminder

This is a final reminder to those who have not paid their 2004 club fees. If you do not renew your membership by paying the club fees then the committee recognises that you no longer wish to remain a member of the club and this will be the last newsletter that you receive.

Waitakere Sprints

The Phone Sprint was held on Saturday 31 July. The second sprint, the CW Sprint, will be held on Saturday 7th August 2004. Please send your Log(s) into Andrew Barnett ZL2ALW Contest Manager WSRC as soon as possible. **Send email**

Western Suburbs Radio Club

Branch 03, N.Z.A.R.T. Inc:

Minutes of the 4th meeting of the 2004 elected Committee.

Monday 26th: July 2004.

Attendance: James Moore ZL1JYM, Chairman, Andrew Barnett ZL2ALW VicePresident, John Turnwald ZL1JT Treasurer, Ross Reddell ZL1VRR; Brian Huggard ZL1MW; Bob Highet ZL1GD, Maurie Challinor ZL1FK; Barry Williams ZL1ACZ Meeting commenced at 19-25 hours.

Apologies: Merv Thomas ZL1SK, Secretary;

Correspondence: Inwards 4 Newsletters from other branches. 2 more subscriptions ZL1TRG Rcpt 111; ZL1TUN Rcpt 110

Submissions to Waitakere City Council tabled. Brian Huggard ZL1MW to go to meeting on Aug: 2nd: 2004
Check of financial members: Barry ZL1ACZ to send out final notice.

A.R.E.C discussion of repeaters, beacons and communications from various locations

General Business:

Discussion of S Freeman's tower, difficult to move.
License for Br: 03 repeater etc; where is it?
Require copy of approved license.
Club needs to see license, Secretary to source (See note below)
Andrew ZL2ALW to use computer gear to carry on with APRS.
Lettering for shield, difficulty in getting lettering done. Maurie ZL1FK to investigate.
Waitakere Sprint, Andrew ZL2ALW will email previous participants.

Meeting concluded at 20-50 hours.

John Turnwald ZL1JT, Scribe / Treasurer.
28th: July 2004.

Merv Thomas ZL1SK, Re-Typer / Secretary.
28th: July 2004.

The Secret Wireless War

-- The Story of MI6 Communications--1939-1945

"There never was, in the whole history of wireless, a bigger role for the amateur wireless enthusiast."--author Geoffrey Pidgeon
Possibly the most important UK wireless traffic in World War II was handled by a unit formed in 1938 as part of the communications division of Britain's Secret Intelligence Services (SIS). The Secret Wireless War offers a history of the SIS, its growing use of wireless in the 1930's, its involvement in the dissemination by wireless of Enigma (Ultra) intelligence, and a whole range of secret uses of wireless as part of the successful prosecution of the war.

The Secret Wireless War documents the personal tales of those who were part of this most secret of units, and events that helped to win the war: secret agents abroad, wireless operators handling "Ultra" and agent's traffic, wireless engineers, interceptors, and administrators; the story of Churchill's personal wireless operator; a fleet of 70+ Packard motor cars and converted Dodge ambulances used as mobile wireless stations; and hams listening to the Abwehr (German secret service) and the Gestapo.

This is an extraordinary story that includes hams among those patriots that undoubtedly helped the allied war effort. 194 illustrations including pictures of secret agent's wireless sets! 416 pages, high-quality paper, hardback. Published by UPSO Limited (UK). ARRL is the exclusive US distributor.
(ISBN: 1-84375-252-2) #9437 -- \$54.95 (May be US Dollars ed). Shipping in August. Pre-order Today!

For Sale

Mike, ZL1ABS, has some gear to sell to make room in his shack. Items include:

EVA200 8mm HOME VCR Recorder, Player with Tuner \$300
FRG9600 60-906 MHz Receiver \$675
TS830S \$595, Tuner \$195, Speaker \$45
TS130V + TL120 + VFO230 \$775
FT290 2m MK2 \$795
FT690 6m MK2 \$795
TS660 \$425
FT225R 2m multimode has PSU built in \$225
10 inch Colour TV/Monitor \$125
5 inch B&W TV \$29
Teletext Video Generator \$20
Solfan 10 GHz Oscillators \$14
Sinclair ZX Spectrum + programs \$15

DSE 6361 Teletext MK3 Tuner kitset (2 available) \$17
 DSE KS410 Video Fader kitset \$19
 ZL1LH SSTV RX \$5
 ZL2TAR 70cm ATV transmitter. Original 1985 design built by ZL2TAR. 10 Watts peak Vision & 1 Watt Sound. In a die cast box with heatsink attached to the Motorola MHW710 power block. \$35
 2424 MHz transverter with 24 element loop Yagi \$325 ono
 3400 MHz transverter with 45 element loop Yagi \$335 ono
 This one has a GA-AS FET preamp built in.
 2.4 GHz 13cm Base station Vertical Colinear Comet GP-24 15.4 dBI 1.78 M long type "N" feed, rated 100 Watts \$175
 6m Square Halo aerial \$75
 23cm 45 Element loop Yagi (21 dBI & 16 deg beamwidth@ 3 dB), Stainless steel bolts, Type N female feed system \$95
 23cm two way power divider for stacking two aerials. Down East Microwave for Contest or DX work. Fitted with three type "N" female connectors on a square, solid metal coaxial tube. \$35
 13cm Comet SF245 5x 1/2 waves 7.4dBi vertical type N mount mobile or base aerial, 0.47 M long, 2400-2450 MHz \$79
 70cm 100Watt linear Amplifier for Satellite uplink or Contest DX. Uses pair of BLU-45/12v in die cast box, generous heatsink for heavy duty use. \$150
 Totsu electric Co CX-600N coaxial relay 12 Volt coil @ 160mA. Fitted with female type "N" connectors. Good item to use with the Amplifier above or for switching horizontal & vertical aerials during a contest. \$90
 BFQ68 transistors. New & unused. Quantity discount of 10% for purchase of four or more . \$35 each
 PCBs for Amateur Radio projects from Break In, CQ-TV, Queensland Amateur & other projects. Request a list from 'z1labs@nzart.org.nz'">z1labs@nzart.org.nz Phone 09-4159584 (24 hour answer phone, so call at any time, evening or morning

Club Nets

VHF Net 146.525 MHz 7:30pm every Wednesday, HF Net 3623 KHz +/- QRM/QRN 7:30pm every Friday. HF Net Roster, Branch 03. The full roster is on: <http://www.qsl.net/zl1ac/wsrc-hf-roster.html>. We have changed the HF Frequency to 3.623 to avoid QRM problems associated with another nearby net. All are welcome to check in on the nets and in particular we would be most happy to have check-ins from the recently upgraded group on the HF net.

6 August 2004	ZL1WI	Roy
13 August 2004	ZL1VRR	Ross
20 August 2004	ZL1MW	Brian
27 August 2004	ZL1JL	John
3 September 2004	ZL1NE	John
10 September 2004	ZL1ACZ	Barry

Note: I may have mucked up the order in last months Newsletter. This is now as it appears on the website. (I hope!) Ed

Ham Radio-Carrying Rocket Exceeds Goal; Avionics Recovered Intact

NEWINGTON, CT, May 19, 2004--An Amateur Radio direction finding team has recovered intact the ham radio avionics package from an amateur rocket that made history by breaking through the barrier of space May 17. Following its launch from Nevada's Black Rock Desert, the solid-fuel rocket easily exceeded its primary goal of attaining an altitude of 100 km--62 miles--considered the boundary between Earth's atmosphere and space. Avionics Team Leader Eric Knight, KB1EHE, told ARRL that the 21-foot, 10-inch diameter Civilian Space Xploration Team (**CSXT**) *GoFast* vehicle reached an altitude of 77 miles according to its onboard instruments, making it the first amateur rocket to do so.



An artist's depiction of the GoFast rocket. Knight said friction encountered during the rocket's high-velocity flight burned away most of the paint and decorative decals.

"We well shattered any definition of space, and everybody's jubilant here," Knight told ARRL from Nevada. "Within two seconds into the flight we were already supersonic. "Knight said 75 to 100 people--many of them radio amateurs--were on hand to witness the launch. Several others asked how they could become licensed, he said. The launch itself "went like clockwork," Knight said, calling it "an awesome experience."



(L-R) CSXT avionics crew members Don Skinner, N1HWR, Eric Knight, KB1EHE, and Rod Lane, N1FNE, work on the rocket's telemetry system in a basement workshop.

During the vehicle's descent to Earth, a ballistic parachute deployed to keep it from tumbling, slow its velocity and make it hit the ground nose first. "The avionics package looks pristine," Knight said. "It could fly again. "That's not likely however, since the CSXT team is hoping the avionics will end up in the Smithsonian Air and Space Museum. "Even though it could fly again, it won't fly again for posterity's sake," he added.

A volunteer aerospace tracking and recovery team of Silicon Valley Amateur Radio operators calling itself [Stratofox](#) was able to zero in on signals from the falling rocket, which came down in rugged, mountainous terrain some 25 miles downrange of the launch site. Knight says [Merlin Systems](#)--a project sponsor--provided the tiny bird-tracking transmitters operating in the 224-MHz range which were imbedded into the parachute shroud lines solely for tracking purposes.

Knight says that after the rocket's return, the team was pretty quickly able to determine within a mile where it had landed, but it took another 24 hours for the Stratofox team to pin it down and recover the entire payload. "Their passion is to find things," Knight said of the Stratofox searchers.

The avionics team's homebuilt patch-type antennas contributed to the mission's success. "We can make them conform to the surface of the airframe," Knight explained. The antennas served the 33-cm telemetry downlink and 2.4 GHz Amateur Television transmitters as well as the onboard GPS units.



This 2002 CSXT attempt to reach space failed when the rocket engine exploded three seconds into the flight.

A colour ATV system was able to provide some photos during the first several seconds of the flight. "We saw some spectacular pictures through lift-off plus about five or ten seconds," Knight said. The rocket's spin--about nine cycles per second--caused the video to blur after that, but Knight said the team hopes to recover some individual video frames using computerized techniques.

Because the CSXT team found itself almost exclusively focused on the mission, a launch-site HF special event station, K7R (for "rocket"), didn't get on the air very much, Knight said.

The avionics team includes eight Amateur Radio licensees, most of whom also were involved in an unsuccessful 2002 CSXT launch attempt (see "[Ham Radio Package Survives Launch Disaster; 'Rocket Boys' Regroup](#)"). The entire 18-member CSXT team is headed by CSXT founder and Program Director Ky Michaelson, a retired Hollywood stunt man.