



## Western Suburbs Radio Club Inc.

### November 2007 Newsletter

ZL1AC, Branch 03 NZART 3000 Great North Road New Lynn, PO Box 15-122, New Lynn. 0600

President: Andrew Barnett ZL2ALW, Secretary: Ragi

Newsletter Editor – John Neill ZL1NE

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

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



### Club Calendar

Saturday	10 <sup>th</sup>	November	AREC Training Papakura Radio Club 0830 until 1700
Monday	12 <sup>th</sup>	November	Club Night – Visit By Auckland Branch – Vintage Radio
Saturday	24 <sup>th</sup>	November	National Horse Riding Endurance Event - Bradly Road, Woodhill.
Sunday	25 <sup>th</sup>		
Saturday 1 <sup>st</sup>	1 <sup>st</sup>	December	Waitakere Civil Defence Headquarters Open Day Elcoat Avenue 9:30 am to 12pm
Monday	10 <sup>th</sup>	December	Club Night – Christmas Social at the Clubrooms.

### November Club Meeting

The next Club Night will be on Monday 12<sup>th</sup> November at 7:30 pm. There will be a visit from the Auckland Branch 02 **ZL1AA** and they are intending to bring and demonstrate some vintage radios and transceivers such as the ZC1 Mk2. They will also provide information on DXing and Contesting. Be there if you can as this promises to be a very interesting evening and a chance to catch up with Amateur Radio Operators from the other side of Town.

### December Meeting

Our annual Christmas Social will be held on 10<sup>th</sup> December at our Club. Start time will be 7 pm. Could each member please bring his own drink and a plate either sweet or savoury. The club will supply a sausage sizzle, some dips and nibbles.

### Western Suburbs Radio Club Used Equipment Sale

The used equipment sale was held on Saturday 13<sup>th</sup> October 2007 and was a great success. All tables were occupied by vendors and although not crowded with buyers a good number of people attended in the course of the morning and many of the vendors reported brisk business. Thanks to all from the club that made the day so successful in what ever part you played.

### AREC Training

There will be an AREC training day at the Papakura Radio Club on Saturday 10<sup>th</sup> November 2007. The course will start at 0830 and continue until approximately 1700 and lunch will be provided. This course is open to all Amateur Radio Operators with an interest in AREC. Photo I.D will be taken in the lunch break and new manuals will be issued on the day to only those who attend the course. Four club members have registered for this course so far. If you would like to attend, then give Ross a call Ph 629 0504 or send an email to [ross.reddell@xtra.co.nz](mailto:ross.reddell@xtra.co.nz)

### National Horse Riding Endurance Event

We have been requested to provide radio communications for a national horse riding endurance event to be held over the weekend of 24<sup>th</sup> and 25<sup>th</sup> November at Bradly Road Helensville. Start times are 10am and 11am on Saturday for 2 x 25 km and 2 x 40km events and 5am and 5:30am on Sunday for 100km rides and 80km events. We require a minimum of 10 operators. If you can assist on either day please let Ross know as soon as possible ph 629-0504 or e-mail, [ross.reddell@xtra.co.nz](mailto:ross.reddell@xtra.co.nz)

### Working Bees

The Club is planning some working bees during the Christmas season. We plan to erect an ATV Transmitter Antenna, co-axial cable and carry out some internal wiring. Help would be appreciated. Working bee times and dates will be broadcast during the HF and VHF nets.

### Club Nets

VHF Net 146.525 MHz 7:30pm every Wednesday, HF Net 3623 KHz +/- QRM/QRN 7:30pm every Friday. All are welcome to check in on the nets. The full HF Net Roster can be found on <http://www.qsl.net/zl1ac/wsrc-hf-roster.html>.

2-Nov-07	ZL1MW	Brian
9-Nov-07	ZL1JL	John
16-Nov-07	ZL1NE	John
23-Nov-07	ZL1ACZ	Barry
30-Nov-07	ZL1WI	Roy
7-Dec-07	ZL1VRR	Ross
14-Dec-07	ZL1MW	Brian
21-Dec-07	ZL1JL	John
28-Dec-07	ZL1NE	John

### New Civil Defence Headquarters

The new Waitakere Civil Defence Headquarters in Elcoat Avenue in Henderson will be open for inspection on Saturday 1<sup>st</sup> December 2007 from 0930 until 1200. Try and make some time available on Saturday morning to view this state of the art headquarters.



Waitakere Civil Defence Headquarters



Radio Booths in the Civil Defence Headquarters

### Secrets of Sputnik Emerge 50 Years Later

By VLADIMIR ISACHENKOV, AP Posted: 2007-10-01

MOSCOW (Oct. 1) - When Sputnik took off 50 years ago, the world gazed at the heavens in awe and apprehension, watching what seemed like the unveiling of a sustained Soviet effort to conquer space and score a stunning Cold War triumph. A Soviet rocket carrying the satellite Sputnik blasts off on Oct. 4, 1957, from Kazakhstan. Fifty years later, scientists involved with the launch have shed some new light on the event, which stunned the world and opened the space age.

But 50 years later, it emerges that the momentous launch was far from being part of a well-planned strategy to demonstrate communist superiority over the West. Instead, the first artificial satellite in space was a spur-of-the-moment gamble driven by the dream of one scientist, whose team scrounged a rocket, slapped together a satellite and persuaded a dubious Kremlin to

open the space age. And that winking light that crowds around the globe gathered to watch in the night sky? Not Sputnik all, as it turns out, but just the second stage of its booster rocket, according to Boris Chertok, one of the founders of the Soviet space program.

In a series of interviews in recent days with the Associated Press, Chertok and other veterans told the little-known story of how Sputnik was launched, and what an unlikely achievement it turned out to be. Chertok couldn't whisper a word about the project through much of his lifetime. His name, and that of Sergei Korolyov, the chief scientist, were a state secret. Today, at age 95 and talking to a small group of reporters in Moscow, Chertok can finally give full voice to his pride at the pivotal role he played in the history of space exploration. "Each of these first rockets was like a beloved woman for us," he said. "We were in love with every rocket, we desperately wanted it to blast off successfully. We would give our hearts and souls to see it flying." This very rational exuberance, and Korolyov's determination, were the key to Sputnik's success. So was happenstance. As described by the former scientists, the world's first orbiter was born out of a very different Soviet program: the frantic development of a rocket capable of striking the United States with a hydrogen bomb. Because there was no telling how heavy the warhead would be, its R-7 ballistic missile was built with thrust to spare - "much more powerful than anything the Americans had,"

Georgy Grechko, a rocket engineer and cosmonaut, told AP. The towering R-7's high thrust and payload capacity, unmatched at the time, just happened to make it the perfect vehicle to launch an object into orbit - something never done before. Without the looming nuclear threat, Russian scientists say, Sputnik would probably have gotten off the ground much later. "The key reason behind the emergence of Sputnik was the Cold War atmosphere and our race against the Americans," Chertok said. "The military missile was the main thing we were thinking of at the moment."

When the warhead project hit a snag, Korolyov, the father of the Soviet space program, seized the opportunity. Korolyov, both visionary scientist and iron-willed manager, pressed the Kremlin to let him launch a satellite. The U.S. was already planning such a move in 1958, he pointed out, as part of the International Geophysical Year. But while the government gave approval in January 1956, the military brass wanted to keep the missile for the bomb program, Grechko, 76, said in an interview. "They treated the satellite as a toy, a silly fantasy of Korolyov."

The U.S. had its own satellite program, Grechko said. "The Americans proudly called their project 'Vanguard,' but found themselves behind us." The Soviet Union already had a full-fledged scientific satellite in development, but it would take too long to complete, Korolyov knew. So he ordered his team to quickly sketch a primitive orbiter. It was called PS-1, for "Prosteishiy Sputnik" - the Simplest Satellite. Grechko, who calculated the trajectory for the first satellite's launch, said he and other young engineers tried to persuade Korolyov to pack Sputnik with some scientific instruments. Korolyov refused, saying there was no time. "If Korolyov had listened to us and started putting more equipment on board, the Americans could have opened the space era," Grechko said.

The satellite, weighing just 184 pounds, was built in less than three months. Soviet designers built a pressurized sphere of polished aluminium alloy with two radio transmitters and four antennas. An earlier satellite project envisaged a cone shape, but Korolyov preferred the sphere. "The Earth is a sphere, and its first satellite also must have a spherical shape," Chertok, a longtime deputy of Korolyov, recalled him saying. Sputnik's surface was polished to perfection to better deflect the sun's rays and avoid overheating.

The launch was first scheduled for Oct. 6. But Korolyov suspected that the U.S. might be planning a launch a day earlier. The KGB was asked to check, and reported turning up nothing. Korolyov was taking no chances. He immediately cancelled some last-minute tests and moved up the launch by two days, to Oct. 4, 1957.

"Better than anyone else Korolyov understood how important it was to open the space era," Grechko said. "The Earth had just one moon for a billion years and suddenly it would have another, artificial moon!" Soon after blastoff from the arid steppes of the Soviet Republic of Kazakhstan, the satellite sent out what would be the world's most famous beep. But the engineers on the ground didn't immediately grasp its importance. "At that moment we couldn't fully understand what we had done," Chertok recalled. "We felt ecstatic about it only later, when the entire world ran amok. Only four or five days later did we realize that it was a turning point in the history of civilization."

Immediately after the launch, Korolyov called Soviet leader Nikita Khrushchev to report the success. Khrushchev's son, Sergei, who was alongside his father at the moment, recalled that they listened to the satellite's beep-beep and went to bed. Sergei Khrushchev said that at first they saw the Sputnik's launch as simply one in a series of Soviet technological achievements, like a new passenger jet or the first atomic power plant. "All of us - Korolyov's men, people in the government, Khrushchev and myself - saw that as just yet another accomplishment showing that the Soviet economy and science were on the right track," the younger Khrushchev, now a senior fellow at Brown University's Watson Institute for International Studies, said in a telephone interview.

The first official Soviet report of Sputnik's launch was brief and buried deep in Pravda, the Communist Party daily. Only two days later did it offer a banner headline, quoting the avalanche of foreign praise. Pravda also published a description of Sputnik's orbit to help people watch it pass. The article failed to mention that the light seen moving across the sky was the spent booster rocket's second stage, which was in roughly same orbit, Chertok said. The tiny orbiter was invisible to the naked eye.

Excited by the global furore, Khrushchev ordered Korolyov immediately to launch a new satellite, this time, to mark the Nov. 7 anniversary of the 1917 Bolshevik Revolution. "We didn't believe that you would outpace the Americans with your satellite, but you did it. Now you should launch something new by Nov. 7," Korolyov quoted Khrushchev telling him, according to Grechko.

Working round-the-clock, Korolyov and his team built another spacecraft in less than a month. On Nov. 3, they launched Sputnik 2, which weighed 1,118 pounds. It carried the world's first living payload, a mongrel dog named Laika, in its tiny pressurized cabin. The dog died of the heat after a week, drawing protests from animal-lovers. But the flight proved that a living being could survive in space, paving the way for human flight.

The first Sputnik beeped for three weeks and spent about three months in orbit before burning up in the atmosphere. It circled Earth more than 1,400 times, at just under 100 minutes an orbit.

For Korolyov there was bitterness as well as triumph. He was never mentioned in any contemporary accounts of the launch, and his key role was known to only a few officials and space designers. Leonid Sedov, a member of the Soviet Academy of Sciences with no connection to space program, was erroneously touted in the West as the Father of Sputnik. Korolyov, meanwhile, was only allowed to publish his non-sensitive research under the pseudonym "Professor K. Sergeev."

Khrushchev rejected the Nobel committee's offer to nominate Korolyov for a prize, insisting that it was the achievement of "the entire Soviet people." Sergei Khrushchev said his father thought singling out Korolyov would anger other rocket designers and hamper the missile and space programs. "These people were like actors; they would all have been madly jealous at Korolyov," he said. "I think my father's decision was psychologically correct. But, of course, Sergei Korolyov felt deeply hurt." Korolyov's daughter, Natalia, recalled in a book that the veil of secrecy vexed her father. "We are like miners - we work underground," she recalls him saying. "No one sees or hears us." The Soviet Union and the rest of the world learned Korolyov's name only after his death in 1966. Today his accolades so long denied them.

"The rivalry in space, even though it had military reasons, has pushed the mankind forward," said Valery Korzun, a cosmonaut who serves as a deputy chief of the Star City cosmonaut training centre. "Our achievements today are rooted in that competition."

In the end, it was the Americans who won the race to the moon, nearly 22 years later. Khrushchev wasn't interested in getting there, his son says, and the effort made under his successor, Leonid Brezhnev, was under funded and badly hampered by rifts between Korolyov and other designers.

"We wouldn't have been the first on the moon anyway," Grechko said. "We lost the race because our electronics industry was inferior."

Today, even as Sputnik recedes into the history books, its memory still exercises a powerful grip. In August, when a Russian flag was planted on the sea bed at the North Pole, the Kremlin compared it to Neil Armstrong stepping on the moon - an indication, perhaps, of how much Russians still treasure that first victory in space.

Copyright 2007 The Associated Press.

