



Auckland Branch
N Z Association of Radio Transmitters Inc.

NEWSLETTER

November 2013



Saturday 16th November 2013

10 am to Noon: Working Bee

- Digging, plumbing a new waste water outlet
- Painting the east wall
- Weeding, erecting poles, etc.

BBQ at Noon

General Meeting at 1330 hours

Agenda:

- To receive correspondence and reports, etc.
- To hear suggestions from the Membership

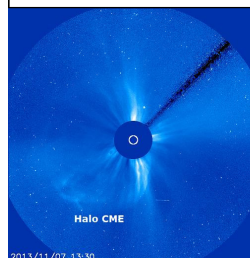
Afterwards:

Discussion about sun-spot activity led by
Selwyn ZL1BRC and Simon ZL1SWW.

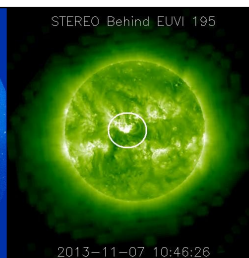
Tips about how to chase DX in these conditions.

Farside Activity

A halo coronal mass ejection (CME) is visible in the latest LASCO C3 imagery. A moderate to strong solar flare was observed Thursday morning around sunspot 1875, currently transiting the farside of the sun. The solar rotation will carry the active region back into view early next week. STEREO Behind captured the eruption as seen in the imagery below.



2013/11/07 13:30



2013-11-07 10:46:26

DIRECTORY:

www.gsl.net/ZL1AA
ZL1AA@NZART.org.nz

Clubroom: 528-2039

Contacts: 524-9969 (Gwynne)

21- 0226-4981 (Steve)

Box 18-003, Glen Innes, Auckland, 1743.

400 St Johns Road, Kohimarama,

Google earth: 36.86973°S; 174.84386°E

ARRL Grid: RF73kr

ASB Bank Account: 12-3047-0076823-00

Nets Mondays 3.645 MHz

8 pm: Thursdays 145.775 MHz

Club: Saturdays 145.775 MHz

Skype: ZL1AA_NZ

Remote K3: [RCForb](http://RCForb.com) / [ZL1AA](http://ZL1AA.com)

From your President George ZL1TUJ



Auckland Council Unitary Plan:

After our General Meeting last month, a discussion was convened by Douglas Birt ZL1BFS, (Secretary of the Hibiscus Radio Society, Branch 80) accompanied by Vaughan Henderson ZL1VH. This was the first of their visits to all of the Auckland Branches with the aim of getting consensus to make **one NZART submission** to Auckland Council about the Unitary Plan and have it supported by all Branches and their Members. Amateurs need to be seen to be consistent in their requirements about antennas, and they need to show the amenity value of their activity for the good of their community.

A subcommittee has been formed, with invitees of each Branch to particularize a NZART submission, backed by the fighting fund to pay for expert legal advice. Amateurs will be kept informed by Infoline, emails and letters to each, and they will be asked that they each make a one line submission during February 2014 to Auckland Council that they “**support the NZART submission**”.

JOTA:

Wallace ZL1WAL organized the ARDF event at Camp Maynard near Albany for the JOTA weekend on 19th October. The next day, Steve ZL1FS helped and brought the gear back.

Contests:

It was pleasing to learn that some of our Members took part over recent weekends in the Oceania and Straight Key contests aided by better openings now that sunspots are active. Don't miss Selwyn's tips.

QSL cards from the Bureau:

The pigeon holes are bulging with QSL cards addressed to our Members and others who are “attached” to our branch by NZART. These people know who they are because the Secretary writes to each person at about the time that remits to the NZART AGM and Conference are to be considered and voted. It is expected that Members call in at the Clubroom to collect their cards and have a chat; **we do not post out**. Accordingly, the Committee resolved that after 90 days, these cards will be discarded unless they are claimed. In future we suggest that SAEs should be sent to the ZL1 QSL Bureau at Musick Point.

Windy equinox:

October's gusts have played havoc with our antennas. Although the loop antenna's poles were guyed, the giant bamboo has not withstood the battering. Even the permanent 40 metre dipole's centre pole broke. And worse, a connection to the beam failed. The main pole had to be stepped by Steve and Japie using their respective trucks. They did a thorough job, refurbishing the joints. Well done fellows. We are looking for groves of fresh giant bamboo. QSL to Gwynne please.

Examination passes: Congratulations Mansel Jeffares ZL1MBJ and Logan Nicoll ZL1LMN. Welcome.

Remotely Controlled Station:

James Knightly, ZL1KNI has installed new software to control my K3. It is called **RCForb** and may be downloaded from www.RemoteHams.com ZL1AA is listed there as a listening station only just now. This is easier to operate than Ham Radio Deluxe, and besides it is free. Try it.

Our Net Controller (Ray ZL1AJR) and some other Members have reported plasma TV causing them RF interference. Therefore our Remotely controlled station will be tuned to 3.645 MHz on Monday evenings so that everybody can listen in. Of course each Member will transmit from their own QTH. At other times the K3 will be tuned to VK2WI on 3.699 Mhz for those wanting practice decoding CW.

Members visiting the clubroom are asked **never to touch this Station, especially the 80m antenna going through the patch panels at Stations 1 and 2.**

Auckland Branch, NZART (Inc.)

Minutes of General Club Meeting

On: Saturday, 12th October 2013 at 1335 hours
At: Clubrooms

Present: George ZL1TUJ, (presiding), Wallace ZL1WAL, Ray ZL1AJR, Robert ZL2RED, Selwyn ZL1BRC, Jeff ZL1TOU, Joseph Wong, and visitors Douglas Birt ZL1BFS, Roger Smith ZL1XR, Vaughan Henderson ZL1VH as recorded in the Attendance book.

Visitors: The President welcomed the visitors.

Apologies: Steve ZL1FS, Gwynne ZL1AAR

Sustained ZL1AJR / ZL1TOU

Minutes of the previous Special General Meeting on 22nd June 2013 at Clubroom.

Having been circulated in the July newsletter, was taken as read and approved:
ZL1AJR / ZL1WAL

Correspondence:

Western Branch Sale day on 2nd November

Finance: The Finance report, as approved at the last Committee Meeting on 1st October was circulated.

Approved ZL1WAL / ZL1TOU

Approved in retrospect, the payment of Insurance Premium \$579.16 (being over \$300)

ZL1WAL / ZL1AJR

Reports:

The Committee adopted a rule to define the quorum required for a General Meeting as:
Four Members (Financial or Honorary Life Members) provided that two of them are Officers. The Constitution provides for such rule making by the Committee when the Constitution requires interpretation.

Erection of the Nally fold-over crank-up tower (ex Estate of John Nixon ZL1FR) is being planned. Meanwhile a plaque to his memory will be affixed.

New software **RCForb** is being used on the remotely operated station. It has a generic radio skin that can be tailored. It is simpler to use than Ham Radio Deluxe; no Skype, just VOIP and besides, it is free to clients. ZL1AA is just one of 50 stations world-wide on the RCForb site. Individual registration with the host is required by Amateurs wishing to tune the radio or to transmit from it.

On Monday night, the station is tuned to 3.645 MHz, so that our Members, who have poor reception at their QTH, can be passive listeners. They transmit from their own rigs.

The ARDF activity at JOTA at Camp Maynard on 19-20 October will be run by Wallace ZL1WAL using three 80m Foxes. Vaughan ZL1VH suggested that with over 250 attendants, the 2m gear should also be used to cope with these numbers. Steve ZL1FS and some younger Members will be attending.

This part of the meeting concluded at 1350 hours.

Douglas Birt ZL1BFS convened a discussion about making a unified submission to the Auckland City Unitary Plan. This is the first of a round of visits to each Branch within Auckland.

He began with a power-point presentation about the present regulations in Auckland and in other regions. The notified unitary plan apes the North Shore provisions, satisfactory for VHF, but unsuitable for HF.

Suggestions made from the floor were:

- *Form a subcommittee comprising Douglas Birt ZL1BFS, Vaughan Henderson ZL1VH, Mike Newman (NZART's Local Government Liaison Officer), Julie Goodyer (Lawyer specializing in environmental matters) and Branch Representatives. They will particularize the submission.*
- *Make one NZART submission (deadline 20 Feb 2014) to be supported by Branches and Members.*
- *Communicate by Infoline, emails, and letters to all Amateurs seeking them each to make a supporting submission.*
- *Fight for and win "Permitted activity" rather than accept "Discretionary activity". Thus each Amateur can avoid having to seek a Resource Consent (costing \$5,000 for each application) every time he wishes to make a change to his antenna configuration.*

Whatever is decided in Auckland will set a precedent throughout NZ for other Councils.

The Meeting concluded at 1512 hours.

Auckland Branch 02, NZART (inc)

Minutes of Committee Meeting

Date / Time / Place: Tuesday 5th November 2013 / 1945 hours / Clubroom

Attendees: George ZL1TUJ (Presiding); Wallace ZL1WAL, Gwynne ZL1AAR, Ray ZL1AJR, Japie ZL1JJN, Wes ZL3TE.

Apologies: Steve ZL1FS, Robert ZL2RED, Selwyn ZL1BRC.

Sustained: ZL1TUJ/ ZL1WAL

Minutes: of the previous meeting on Tuesday 1st October 2013

Taken as read and approved ZL1WAL / ZL1TUJ

Correspondence In:

- Newsletters: Franklin, North Shore (by post); Western, VHF Group, Hibiscus Coast (by e-mail)
- Douglas Birt ZL1BFS minutes of discussion about making a submission to Auckland Council
- Vaughan - Who knows Colin Alexander ZL1CUT of Remuera?
- Selwyn x 3 ; report on sun spot activity and his suggestion to make it a topic for discussion
- Paul ZL1CQ – definition of Straight key – operator must manually make dit, dah and spacing lengths.
- Andrei – “Save my QSL cards”
- Raymond AH6TY and Horst DF6SAK - request to use Remotely controlled station
- Marlborough Sounds and Wairau / Awatere: Amateur plan changes acknowledged but “kicked to touch”
- QSL cards
- Selwyn – introducing Richard Smithson

Correspondence Out:

- James ZL1KNI ; Remotely controlled station
- Raymond AH6TY

Received and approved ZL1WAL /ZL1TUJ

Finance:

- The Treasurer submitted the Finance Report. There are just sufficient funds to reach the end of year.
- Expenses requiring approval:

○ Broadband	Orcon	\$75.00	Direct debit each month
○ Lawns	R Higgins	\$36.80	
○ Whip antennas	Steve	100.00	
○ Batteries for JOTA	Wallace	\$15.00	

Received and approved ZL1WAL/ ZL1TUJ

General Business:

- **Progress reports:**
 - AREC exercise at VHF group. George ZL1TUJ and Brian ZL1UXB attended. They found that it was badly run by Civil Defence and was a waste of time with respect to communications.
 - Maintenance
 - Sink outflow. Trench to be dug
 - Possum. Access to be blocked.
 - Painting of east wall.
 - Poles for 40 m antenna. Gwynne will enquire if giant bamboo is available.
 - Clear grass around site for the tower.
 - Remotely operated station:
 - James ZL1KNI has set up the host end of the RCForb software that defines the skin (appearance and controls) of the station.
 - It is always working unless someone ignores the “Do not touch” signs and leaves the 80m antenna disconnected.
 - Only the 80m antenna is connected and anyone can listen on Monday nights to the ZL1AA net (because the station default will be tuned to 3.645 MHz). Download RCForb and click on ZL1AA (among 30 others). Its operation is intuitive and no harm can come to the K3 rig.
 - James is reviewing the “Operation Manual” after which it will be issued to financial Branch Members who request to be entered on the “Client list”. Only then will they be able to tune and transmit.
 - Applications are being received by overseas Amateurs.
 - Wes explained DXCC rules that require that applicants must be **present** in the country of the transmitter.
 - It was suggested to add the feature: “Wake up by LAN” to power on the PC and K3.
 - QSL handling. QSL cards are being received with US\$2.00 (as instructed by our QRZ page).
 - Examination: Logan Nicoll ZL1LMN obtained his licence.

Minutes of Committee Meeting 5th November 2013 (Continued)

• Past events:

- Auckland Branch was the first in a round of Branch visits led by Douglas Birt ZL1BFS who, supported by Vaughan ZL1VH, advocates a single NZART submission. Points made were:
 - All Amateurs will be advised about its prescription by 1st February 2014 and they will be asked to make a simple "I support the NZART submission" by 28th February 2014.
 - NZART will disassociate itself from any other Amateurs' submissions, so as to avoid what might be seen as disarray among Amateurs.
 - The North Shore plan may suit VHF sites, but not HF.
 - However the words "discretionary activity" have been applied to this plan. It is important that this be replaced by "permitted activity". Otherwise, every change of configuration of an antenna would require resource consent — each at a possible cost of \$5,000.
 - Tauranga took 2½ years to reach the Environmental Court, and even their wish list was compromised.
 - Auckland's submission is likely to develop into a must-win campaign because it will set a benchmark for all Councils.
- JOTA at Camp Maynard was described by Wallace who set up the Fox and Hounds event. Only 20 participants were recorded. Steve attended on Sunday and had to nurse them along.

• Future Events:

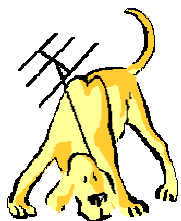
- A working bee is required to paint the east wall and finish other long outstanding maintenance.
- General Meeting 16th November. Selwyn will be asked to explain recent sunspot activity and the opportunities for DX.
- Santa Parade 24th November. Marshalls with 70 cm hand held and yellow jackets are required.
- AREC Meeting Thursday 28th November 1930 hours at Papakura Branch 65
- AGM 10th December
- JWFD in February 2014. A "B team" will be formed to give our newer members experience and encouragement to contest.
- Inter-branch Fox hunt in March 2014. 80 m gear will be used. Wes will purchase 3.54 and 3.55 MHz crystals. Steve has an Arduino program for fox Id keys (of "MOH" and "MO5" at 8 wpm) to be built into these two foxes.
- Fox hunting during the Orienteers' mid-week after-work events in parks this summer.
 - Epsom Campus Wednesday 20th November.
 - Western Springs Wednesday 27th November
 - McLeans Park (Eastern Beach) Thursday 5th December
 - Hamlins Hill Thursday 12 December
 - Cornwall Park (Archery Carpark) Thursday 19th December
- Fox hunt to be organized for the Pony Club.
- Visit to Hibiscus Coast Radio Society. Keen interest was shown by the Committee. Wallace is to enquire from them about a suitable date.

- **The tower:** No progress.

• Other business:

- A pony Club representative on discovering that a wire gate, that had been stored behind the implement shed over six years ago, had fallen over and damaged their fence, sought help at the club-room. Our two elderly and Hon. Life Members tried unsuccessfully to lift the gate. Fortunately Steve arrived in time. He hacked off the protruding metal and repaired the damaged fence. There was no need to call Auckland Council.
- The extension cable to operate the rotator controller from Station 2 has not been built. Perhaps it is deemed not to be unnecessary now.
- Whereas it was resolved in General Meeting to buy a Kenwood 480HX, this resolution included the stipulation that the Kenwood 450 would need to be sold to pay for it. Meanwhile, there has been a request not to sell it, so long as Branch funds hold out. The Treasurer produced a budget showing our near-zero cash position. In February our Term Deposit will mature, just in time to meet our pledges to the Unitary Plan Fighting Fund. Gwynne offered to finance this radio if it becomes absolutely necessary.

The meeting concluded at 2200 hours with a hot supper provided by Ray ZL1AJR. The fireworks, downpour, thunder and lightning eventually stopped.



The Fox hunting page

by Wallace ZL1WAL



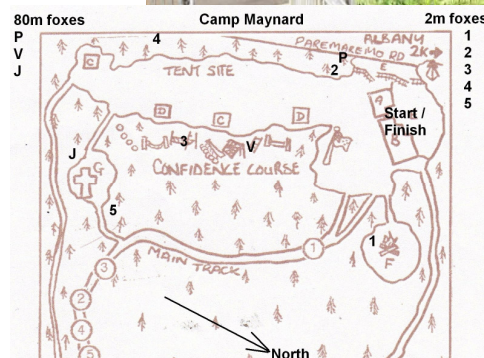
JOTA and IOTA for Scouts, Guides and Badgers was held at Camp Maynard, near Albany on the weekend of 19th and 20th October. North Shore Branch 29, erected antennas, set up radio stations, laptops with echo-link, morse testing, and other communication related activities, then supervised these activities with the assistance of Leaders, so that the younger participants can earn their Communications badge. One of these activities was described as "Fox and Hounds". I set up two such events:

- five foxes transmitting on 2 metres at 144.7 MHz (as has been done in previous years),
- three foxes transmitting on 80 metres at 3.51. 3.52 and 3.53 MHz .

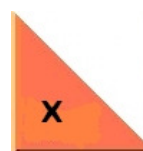
Administration of the Start and Finish was run from this balcony where three Leaders were assigned to assist. They had to tell each participant what was expected, show them how to operate the sniffers (radios) and record participants' times. Each participant was allowed half an hour out before points would be deducted for each minute late in returning.



The foxes were "hidden" in the bush-line around the tent site as shown in this photograph looking south. Refer to the map where numbers 1 through 5 show the positions of the 2 m foxes, and the letters P, V and J show the 80 m foxes.



The call-signs transmitted by the foxes are
MOE (dah dah, dah dah dah, dit (one last dit),
MOI (two last dits), MOS, MOH and MO5.
Once located, they were visibly identified by these orange and white prism-shaped flags.



Steve took over the supervision on Sunday and he reported that he had to nurse some younger participants around the course. Disappointedly, only 20 were recorded over both days.

Yoh Hiroshi Izuta, JF1RPZ is appointed as a Chairman of IARU Region 3 ARDF Committee.

He says:

I am very pleased to work with you on Region 3 ARDF activity. I would like to do my best for this duty and also would like to expand this ARDF games more popular within Reg.3 area together with all of you. So, your support would be highly appreciated.

I am living in Tokyo, Japan. In 1971, I got my first Ham Radio license (JA4PHT) and started enjoying CW/DX/Contest which continues until now. In 1985, first time, I enjoyed ARDF event (called Foxteering at that time) in Japan.

In 1988, I participated World Championships in Switzerland as a competitor representing Japan team, first time.

In 1993, I participate 1st IARU Reg.3 ARDF Championships in Beijing, China as an international referee, first time.

Since 1990, I have been appointed as a member of JARL ARDF Committee.

For these 20years, I have joined many international ARDF events, including World Championships, Region 3 Championships and Region 2 Championships.

As for other Ham radio activity, I have been authorized as Japan 1st class ham radio license (JF1RPZ, JN3TMW), US Extra class license (NE6Z) as well as Hong Kong ASL license (VR2IZ).

Best Regards,

GL 73 es 88 TU SK _____ / de JF1RPZ JN3TMW VR2IZ NE6Z (ex KG6CEH, JA4PHT)

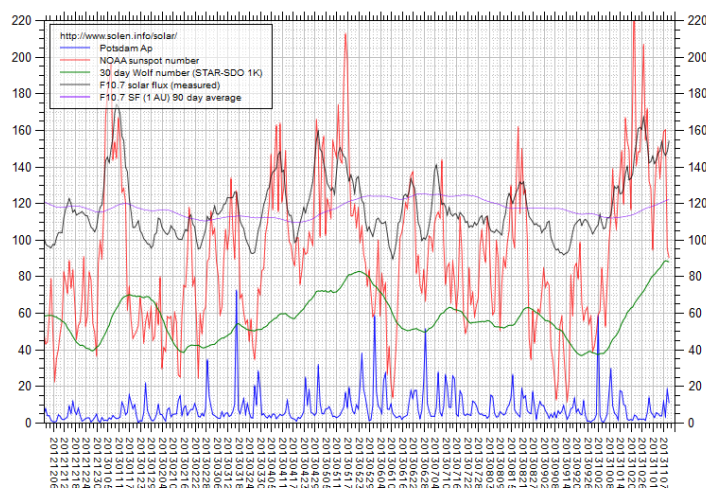
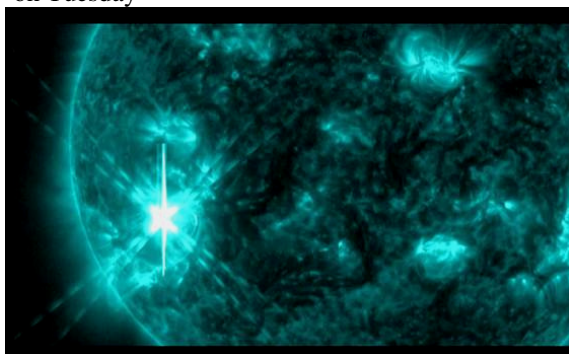
SOLAR ACTIVITY

I have suggested to the Committee that it is appropriate, following the resurgence of Solar Cycle 24, to hold a general forum on 16 November covering a range of topics on propagation to bring members up to date. These should include:-

- What we can expect in future from the apparent second peak in this Cycle and how to extract maximum benefit from it, both for ZL1AA and for our personal logbooks
- The possibility that there may be from mid-November to mid-January or later enhanced short skip propagation on 10 metres to southern ZL stations and to VKs and others nearby depending on summer solstice effects on E region of the ionosphere.
- The benefits of 6 metres availability from early December on propagation on this band whether by F2 region or general E or sporadic E or the like. In this topic especially as well as others generally we hope to have the expertise of Simon, ZL1SWW, to guide us..
- SSB DX operation techniques for use on any of the HF bands. I have reasonable skills and experience (as testified by the ZL1AA logbook) in working DX at all levels of signal strengths from S9 plus down to S1 or so, including respecting band plans, finding and occupying clear frequencies, proper use of phonetics, the need for clear incisive diction recognizing that the other station may have severe QRM to contend with at his end. Too often I hear the excuses made that members may want to work DX from home when there are many hundreds or thousands of English speaking stations out there who would be delighted to hold a normal, natural, intelligent, conversation with a rare call like ZL1AA, instead of a contest call "59 100 QSL?". There is absolutely no need to be microphone shy. They are very friendly.
- Time permitting, a brief introduction to the amateur radio resources available on the Club's computer. If not then please try me or other members at other times. At other times you may wish to try me for such computer techniques as I know, including Internet searching which I can do from home, selective copying and/or printing of parts of Internet and other files, and if you know of potential amateur licence exam candidates an e-mail copy of my Tutorial Notes 2013 version.

Selwyn Ross ZL1BR

The sun fired off its strongest solar flare of the year on Tuesday



Forecast

The geomagnetic field is expected to be quiet to minor storm on November 11-12 due to CME and coronal hole effects.

Coronal holes (1)	Coronal mass ejection (2)	M and X class flares (3)

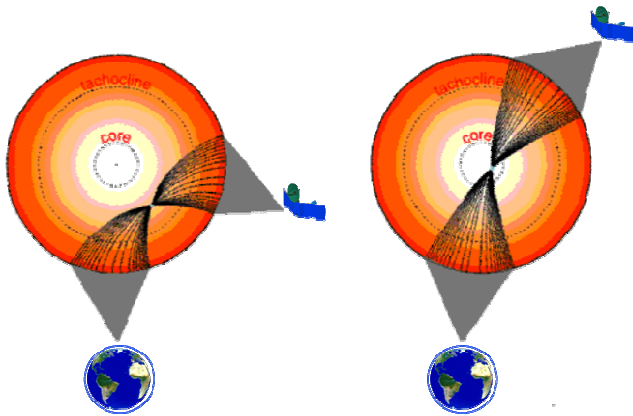
1) Effects from a coronal hole could reach Earth within the next 5 days. When the high speed stream has arrived the color changes to green.

2) Effects from a CME are likely to be observed at Earth within 96 hours.

3) There is a possibility of either M or X class flares within the next 48 hours.

Green: 0-20% probability, **Yellow:** 20-60% probability, **Red:** 60-100% probability.

Solar Activity Farside Investigation



Science Objectives:

Safari will quantify:

Where in the sun solar variability originates

How magnetic fields emerge and evolve on the solar surface

How solar magnetic fields map into the global heliospheric structure

These objectives will be achieved by using time-distance and other helioseismology techniques to probe the deep solar interior and by measuring magnetic fields over a wide range of solar longitudes.

Measurement Strategy:

- Safari will acquire simultaneous measurements of photospheric velocity and magnetic fields from two separate and varying solar longitudes (one near-Earth) to probe the deep interior of the sun and track the evolution of magnetic activity

Mission Implementation Description:

- Single spacecraft launched by Taurus class L/V
 - Operational orbit: Earth-leading, ≈ 2 yr duration
 - Spacecraft pointing: $\pm 0.5^\circ$ control, knowledge $\pm 0.1^\circ$
 - Weekly data volume: ≈ 30 Gbit
- Compact Doppler-magnetograph
 - Instrument pointing: ± 0.5 arc-s (w/ fast steering mirror)
 - 8 kg, 15 W, Average data acquisition Rate ≈ 42 kbps
 - up to 5" spatial resolution
 - Velocity sensitivity < 10 m/s/pixel

Associated RFAs:

- F4. Understand the creation and variability of magnetic dynamos and how they drive the dynamics of solar, planetary and stellar environments.
- H1. Understand the causes and subsequent evolution of solar activity that affects Earth's space climate and environment.
- J2. Develop the capability to predict the origin and onset of solar activity and disturbances associated with potentially hazardous space weather events.

Technology Development:

- Compact Doppler magnetograph
- magneto-optical filter TRL 4