

Official Review of the RCCNZ search for Sailing Vessel Nina

Crew members' families' submission

Co-authors and signatories.

This document has been prepared and signed by the closest relatives of each of the five (5) families on-board the schooner Nina:

Dyche Family

Cherie Martinez

Tennessee, USA

Cherie is the twin sister of David Dyche, and signs also on behalf of:

Caryl Dyche, mother of Nina Captain and Owner David Dyche

Dorothy Nelson, mother of Rosemary Dyche

Julia Roach, niece of David and Rosemary Dyche

Jessica Surovek, niece of David and Rosemary Dyche

Jennifer Eiland, niece of David and Rosemary Dyche

John Gray, best friend of David Dyche

Jackson Family

Duane Jackson and Amy Wiebe

Nebraska, USA

Duane and Amy are the parents of Kyle Jackson and also signs on behalf of:

Kyle Jackson's family and extended family


Nemeth Family

Laszlo Nemeth

Colorado, USA.

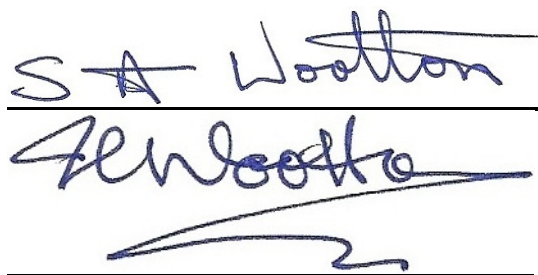
Curly Carswell

Savusavu, Fiji



Laszlo is Evi Nemeth's son, and Curly is Evi's partner. They sign also on behalf of family, friends, and Evi's former students.

Wootton Family



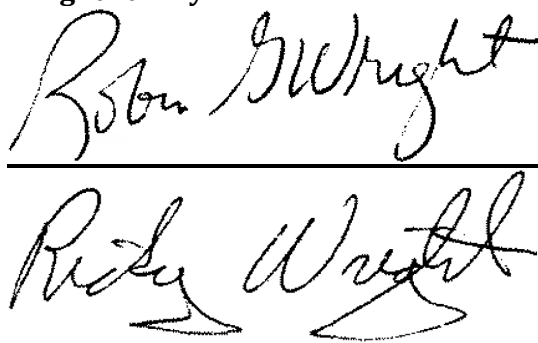
SA Wootton
Ian Wootton

Sue and Ian Wootton

Kent, UK.

Parents of Matthew Wootton, and on behalf of Lara Inwood, sister of Matthew, extended family, and Matthew's many friends.

Wright Family



Robin Wright
Ricky Wright

Ricky and Robin Wright

Louisiana, USA

Parents of Danielle Wright, and on behalf of Family and extended family and friends of the Wrights

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Official Review of the RCCNZ search for Sailing Vessel Nina Crew members' families' submission

Summary

The families of Nina crewmembers believe that the RCCNZ search for the Nina was highly flawed in a number of key areas.

The timeline of the Nina voyage, period of non-communication, and RCCNZ search is presented in detail.

Specific questions are raised which merit critical analysis by the review, in these areas; a) lack of adequate concern and consequent delay b) questionable search effectiveness due to incorrect co-ordinates and extended radar ranges c) lack of involvement of international authorities and assets d) dismissive attitude towards satellite images.

Finally, specific actions are recommended, for both the Nina search and for longer -term approach to SAR.

Time-line summary

Nina left Opuia, New Zealand, on May 29th, with an experienced crew of seven (Appendix 5).

Daily 'Spot' readings, received until June 2nd, and the Last Known Position (LKP) given by the crew on June 4th, show an average daily distance travelled of 82 miles. (490 miles in 6 days, 3.4 kts).

Nina hit a storm on 3rd June, and last communications were on June 4th. Renowned weatherman Bob McDavitt failed to get responses from his communications, 5th – 7th June.

Crew member's families had concerns on 6th June, and Curly Carswell contacted Australian Maritime Search and Rescue (SAR) official agencies on 9th, and (via friends in NZ) New Zealand SAR on 14th. (Note: Curly Carswell, partner of crew member Evi Nemeth, is an experienced blue-water sailor, ex NZ military, yacht delivery captain, and sailing lecturer, who has previously assisted NZ in SAR missions).

RCCNZ commenced a communications search on 14th, but despite their view of the storm as 'exceptional', and the concerns expressed by Curly Carswell, did not escalate the SAR Phase level. Consequently, active searching was not commenced until June 25th, which RCCNZ determined as the expected date of arrival in Newcastle Australia. (Note 2: This differs significantly from the arrival date of 10th June predicted by the Nina captain. Also, at 82 miles per day, the date of arrival would have been 12th June latest). Bob McDavitt recalls that RCCNZ

phoned him mid-June, so all communication issues should have been known to them.

The areas for the active search were generated using a LKP taken from an Iridium position, despite the apparently well-known inaccuracy of these positions over water, and discounting the position given by Evi Nemeth, (who is a mathematician professor and meticulous navigator) as an error. (Note 4: Evi's position, unlike the Iridium position, is fully consistent with previous SPOT positions, and is 226 miles West of the Iridium position). Evi's LKP is not used until July 2nd.

The success of the search was critically dependant on the capability of the ELTA radar, which on Search Days 2 and 8 (Days 29 and 37) was used at ranges up to 120nm. The capability of the radar was apparently not known, and Day 1 searches involved assessing its abilities, commencing at ranges of 40nm. (Note 5: Radar theory, and information from other sources, question whether Nina could have been reliably detected even at 40nm, particularly if dis-masted, and bow-on to the aircraft track.). The circular currents in the Tasman mean that the two radar searches, 9 days apart, could easily have failed to detect the Nina.

No assistance was sought from other Authorities (e.g. Australian, New Caledonia, Fiji, SAR, and USA resources).

The search was **suspended** on July 5th.

Families commenced a private search from July 8th, involving visual air searches and viewing of satellite images. Images from 3rd August were released to RCCNZ on 16th August, and images from 16th September released to RCCNZ on 20th September. Whilst there was wide agreement from the search team that these were legitimate targets, RCCNZ did not find these images as 'sufficiently compelling' to re-start the search or provide any search assistance to investigate.

[A detailed time-line is given in Appendix 1.](#)

Summary of concerns about the search procedures and practice

This section summarises the questionable areas of the search.

(Detailed questions are given in the following section)

Failure to meet obligations of International Aeronautical and Maritime Search and Rescue (IAMSAR) manual.

Lack of adequate concern, failure to raise SAR Phase level, and consequent delay in launching SAR Operations.

Despite the storm conditions being (according to RCCNZ) appalling bad, despite serious concerns being expressed by experienced family members as early as 6th June, and despite RCCNZ knowing (before mid-June) about the lack of communication, RCCNZ failed to show any significant urgency or concern, or to raise the concern level above Uncertainty Phase.

Questionable effectiveness of the search.

The Search Area Determinations were deficient, using an incorrect LKP instead of the LKP as given by the Nina crew.

The radar effectiveness was experimental, not proven. The claimed effectiveness of the highly extended search ranges is not borne out by theory or by past experience.

The so-called 'largest search in NZ SAR history' amounted, in real terms, to a much smaller effective search that failed to 'clear the area' or provide any confidence that the Nina would have been found.

Dismissive attitude towards satellite images.

RCCNZ were presented with a number of satellite images that had a high likelihood of being small boats (or in one case a life-raft). Despite RCCNZ having little experience of such images (which had all been viewed by a TES review team and deemed worthy of further investigations), they dismissed these images as 'not amounting to new information' and 'probably wave formations'.

Digital Globe were now providing 0.5m resolution panchromatic images (replacing earlier colour-enhanced images), and access to 'Raw images'.

The image of 16th September was considered a very good match for the Nina, but no action was taken on it, after first being dismissed by RCCNZ as being a boat, and then dismissed on 'expert review' (no details given) as not being the Nina.

Lack of involvement of other countries, and misrepresentation by USA.

RCCNZ state that they saw no need to involve other countries. This was a missed opportunity for involvement of US military assets, US satellite images capabilities, and Australian and New Caledonian SAR. As a result, USA has misrepresented the search suspension status, and hindered, rather than helped, the private search activities.

Detailed questions

1. Why didn't Australian Maritime Safety Administration contact RCCNZ when the first 'concern' contacts were made to them on June 9th. ?
2. Why was the 'Alert Phase' (as defined in the IAMSAR manual) not immediately invoked? (RCCNZ were aware 'around mid-June' of contacts between Evi Nemeth and Bob McDavitt, and Bob records that they spoke to him then. Bob had information that showed Nina had missed an update call at 6pm on 4th June, and had subsequently not responded to calls).
3. Why was the status not almost immediately upgraded to Distress Phase, given the known weather conditions, the situation as noted above, and the failure of communications searches? [A search might then have been commenced perhaps 10 days earlier than actually occurred, thus enabling a much more targeted search, with greater probability of success (and lower costs!). If the crew had had to take to the life-raft, this 10 days (in winter conditions) would have made the difference between likely rescue and probable death].
4. RCCNZ state that a search was commenced (on Day 28, June 25th), when the vessel was 'overdue' at its destination. But the captain's expected arrival time, provided to RCCNZ by the families, was approximately Day 13, June 10th. Given the vessels known progress in the first 6 days, why was such a late arrival time assumed (thus delaying the search by perhaps two weeks)?
5. What was taken into account when considering what actions to take? Subsequently RCCNZ stated the storm to be 'exceptional', so why did this not elevate the level of concern? The crew were experienced, but had missed a position report and had thereafter failed to communicate. The families of the crew, also experienced, had expressed high concerns. These should all have raised the concern levels.
6. RCCNZ stated, in a taped conversation on January 23rd 2014, that 'recreational blue-water yachtsman' are always failing to make contact, and "we have hundreds of alerts every year and you don't go and look at every one without it being sufficiently compelling". It's difficult to understand what is not sufficiently compelling about a world-famous yacht, captained by a professional seaman, with an experienced crew, failing to communicate after an exceptional storm after being in constant contact with a renowned weatherman, notified as missing by a recognised expert professional yachtsman, and already overdue (based on the consistent progress during the voyage) by the time of notification and with no available intermediate stopping point. What **WOULD** have been sufficiently compelling?

7. When did RCCNZ become aware of the 'undelivered message', and what more could have been done (e.g. more direct contact with US State department) to obtain the content of this message more quickly? Will any action be taken with Iridium to ensure that such circumstances cannot re-occur?
8. Why was the Iridium LKP, and not the Crew's LKP, used in determining search areas for the first 6 days of the search? (See Appendix 3, for discussion of Search Areas, and comments by RCCNZ Watch Leader, in Timelines, June 30th).
9. Why were RCCNZ not aware of the inaccuracy of Iridium positions over water? This is understood to be well-known and well-documented information, but should more be done (e.g. by RCC, Iridium, US Authorities) to ensure that all necessary parties are aware of it? (see Appendix 6).
10. Why did RCCNZ not consider the weather maps when deciding to use the Iridium position rather than the position provided by Evi? *[Appendix 4, weather map, indicates that the Iridium position would not have been experiencing severe storm conditions].*
11. Why were 'experimental' radar detection distances used in the search, with seven lives at stake? The RCCNZ report states that one key purpose of the 'transit' search on Day 1 was to "assess the efficiency of the aircraft radar in detecting objects both smaller and of similar size to SV Nina". Yet the ranges used on Day 1, in Sea State 1, were initially 40nm, and then increased to 160nm. On day 2, where the major search took place, a range of 120 nm was used for the important search area, with sea state 2 and 3. The 'transit' experiments on Day 1 hardly constitute a validation of capability which justifies the use of these ranges on such a critical mission.
12. Can RCCNZ provide data that shows that a wooden vessel, without a mast, with a freeboard of 5ft, bow/stern on to the track of a search aircraft, be RELIABLY detected at even 60nm distances, in Sea States 2,3 or worse? *[On one day of assessments, they detected some yachts, in calm seas. How do they know that they detected ALL the yachts, and under what circumstances? Were the yachts they detected of similar construction and attitude (e.g. wooden hulled, no masts, bow-on?) to possible Nina circumstances? Did they repeat tracks to validate target detection?]*
13. Have RCCNZ discussed with the military operators the theory, and previously reported information, on radar capabilities that suggest that reliable detection of the Nina by radar could not be expected above 40nm?
14. What were the ACTUAL tracks of the Orion P3 during the searches? This information has been requested repeatedly, but never provided (on the seemingly unreasonable grounds of it being 'Classified')

information). (Note 3: Minister Gerry Brownlee agreed, 23/01/2014. With Robin and Ricky Wright, to review provision of this data, along with the expert review of the Sept 16th Satellite image.)

15. Are searches recorded (videotape? Digital?) ?
16. Were the Search Areas mainly misdirected, and on Search Day 2, unnecessarily large (quantity instead of quality)? (See Appendix 3)
17. Why did RCCNZ start the search with the preformed opinion that the Nina had sunk? (A family member present at the search stated “When people want to believe something, or are convinced something is the truth, it is almost impossible for them to think otherwise even when presented with facts. This is the feeling I get with RCCNZ, both when we were there (some of the guys were so convinced they had gone down on the 4th it wasn't even worth discussing alternate possibilities), and now...”
18. What consideration was given to the 4th July letter from experienced yachtsman, Curly Carswell (Appendix 2)?
19. Why were RCCNZ so dismissive of the August 3rd Tomnod image No. 396937, as ‘probably a wave formation’ when experienced SAR air spotters and crew all agreed that it showed a boat?
20. Why were RCCNZ so quick to dismiss the September 16th Tomnod image, without initially even obtaining expert review of an image that clearly shows a Nina size boat?
21. When an expert review of the September 16th Tomnod image was requested, did the reviewers consider that the reported differences in ‘bright-ups’ and stern shape may be related to a dis-masting, and to possible rigging of a water catchment system? (See also Note 3, Q14).
22. With American military undertaking extensive exercises in the vicinity of the Nina’s likely position, had it survived the storm, why was the opportunity not taken to ask for assistance in the search for an historic American yacht with 6 American citizens?
23. Why is there no physical evidence supporting the RCCNZ view of a ‘catastrophic event’?
24. Why were RCCNZ so ready to accept the ‘catastrophic event’ scenario, when the vessel had a record of riding storms well, was reported by Whangarei harbour-master to have been in excellent condition, and had a keel that would quickly right her if rolled?
25. What is the reliability of detection EPIRBs (knowing that previous lost yachts had activated and EPIRB that was then not detected)?

Requested Actions

The families believe (and RCCNZ agree!) that there remains a possibility that Nina survived but was damaged by the storm, and is still drifting. Drift models suggest that the vessel could still be drifting near to its LKP. But experience of a number of other vessels, which have been abandoned but floated for as much as 18 months before making landfall in Australia, (or in one case, Tonga) indicates that a drift towards the North East of Australia is also quite likely. There are areas here that have never been searched. (For example the vast Chesterfield Reefs area, with a history of ship-wrecks).

The families believe that, given the many uncertainties and failures in the search so far, the review should recommend that further search activities are undertaken. These should include:-

Satellite imagery, or preferably visual air searches, of the Chesterfield reefs area and other reef areas in this vicinity. An official request to the USA for assistance may prompt involvement of the NGA, with their ability to provide higher quality/resolutions images.

Review other unsearched areas, with reefs/islands/atolls that are sufficiently remote for a drifting Nina to be grounded and undetected. (as agreed with Minister of Transport, Gerry Brownlee, on 23rd January 2013)

Furthermore, with extensive USA military presence in these areas, a formal request for assistance from US Assets may make available further search options.

In tandem with these, the families would request the restarting of a communication to Tasman/Coral Sea shipping (and local air-traffic to outlying islands and reefs), not just from RCCNZ but also from SAR functions in other countries, to ask for assistance in locating Nina (which would likely be without masts) or wreckage.

Appendix 1

Timelines

ALL TIMES ARE NZ LOCAL TIME (displayed as 24 hr. clock) UNLESS OTHERWISE STATED

DAY 1: MAY 29TH 2013

Nina leaves Opuia.

SPOT: 12:15 hrs -35.17056 174.14554 E

IRIDIUM: 16:32 hrs -34.9500 173.9900 E

DAY 2: MAY 30TH

SPOT: 11:45 Nina is OK -34.13174 173.02081 E Nina has travelled 84 nm

DAY 3: MAY 31ST

SPOT: 14:48 -33.43472 171.892000 E Nina has travelled 154 nm

DAY 4: JUNE 1ST

No SPOT report

IRIDIUM: 16:37 -32.1717 174.2326 E

IRIDIUM: 16:44 -31.9095 159.9110 E

DAY 5: JUNE 2ND

SPOT: 12:48 -33.599333 168.524667 E Message: Evi and Nina are OK.

This was the last known SPOT report. Nina has travelled 323nm

IRIDIUM: 23:33 -33.4598 167.0595 E

DAY 6: JUNE 3RD MONDAY

Circa 15:00 Evi Nemeth calls Bob McDavitt on Satellite Phone.

Bob McDavitt's notes:

"Evi Nemeth called me via sat phone from SV NINA during afternoon, and I got her to call me back in 30mins, downloaded some weather data and when she called back passed on the following forecast, which I then sent on by txt and email to her Iridium phone so as to set up those as possible communication links:

At 416pm Go south to 34S. NW wind eases. By 9pm tonight local heave-to, brace for SW storm 50 knots g 75 knots. bob

Swell is forecast to rise to around 7 ocnl 10 metres during Tuesday noon to 6pm local. more..

4:17pm Late Tuesday the wind and swell should ease, Ok to resume to west. Bob"

IRIDIUM: 21:41 -34.1130 161.4239 E

DAY 7: JUNE 4TH TUESDAY

IRIDIUM: 0939 -33.8327 169.6894

EVI TEXT 0939 -33.9000 165.3000 Good

Evi Text: ANY WEATHER FOR NINA? S 33 54 E 165 18

This was the last good position. Nina has travelled 490 nm

11:25 Bob McDavitt reply. "Stay hove-to until around 6pm Wednesday. SW wind peak at 45 g60kt was around 6am today- Peak swell 8 significant m around 9pm tonight Tuesday."

JUN 4 11:50 (23:50:25 June 3rd, GMT) NO POSITION- UNDELIVERED TEXT :

THANKS STORM SAILS SHREDDED LAST NIGHT, NOW BARE POLES. GOINING 4KT 310DEG
WILL UPDATE COURSE INFO@ 6PM 1 (end of recording)

18:00 Crew misses update.

DAY 8: JUNE 5TH WEDNESDAY

19:04 hrs. First concerns expressed.

"Hi Libby and Laz, My last record for Evi was 4 days ago???? Have you any word or spot info???? Sorry for any inconvenience caused... Regards, Curly"

DAY 9: JUNE 6TH

13:02 hrs. Unanswered call to Evi from Bob McDavitt: "My call at 1:02pm. Swell should be easing now, OK to go west. But another front 071800UTC/Sat am local with strong NW then near gale SW until 081200UTC."

DAY 10: JUNE 7TH

14:39 hrs. Bob McDavitt. "My call at 2:39pm. How is weather and progress today? Bob"

DAY 11: JUNE 8TH

Nothing to report

DAY 12: JUNE 9TH

FIRST CONTACTS TO SAR.

16:29 Curly Carswell to Bob McDavitt.

Hi Bob, I was hoping upon hoping Evi would have called you if the weather deteriorated...bloody brilliant bad luck you have lost Comm's, we do not know if Nina has an EPIRB we are trying to find out from mutual friends who were around Nina in Opuu.

I will pass your info onto the Australian Maritime Safety Administration, who I contacted a couple hours ago re a Health and Welfare request only for Nina...Thought their famous Border Control long range surveillance capabilities may have some word for us...

If you do hear from Nina please email. Thanks for always being there Bob, sure is appreciated. Regards, Curly

DAY 13: JUNE 10TH

Nina's expected arrival date in Newcastle, Australia.

Curly Carswell contacts yachting friends in Opuā, requesting they contact NZ SAR. [Although there were discussions in Opuā, RCCNZ were not notified by e-mail until 14th June (day 17)] .

DAYS 14-16: JUNE 11TH – 13TH

Nothing to report

DAY 17: JUNE 14TH

RCCNZ quote this day as the first time they have been made aware of concerns about the Nina.

RCCNZ commence communications search.

DAY 19: JUNE 16TH

Around Mid-June: RCCNZ contact Bob McDavitt. Precise date is unknown.

“RCC got in touch with me via phone and, unfortunately, I didn't record the date of this contact – I vaguely recollect as being around mid-June, and again late in June.

Sorry that I can not be more specific. Bob McDavitt. “

DAY 28: JUNE 25TH

RCCNZ considers Nina to be overdue arriving at planned Newcastle destination, and commences first air search. This search uses an Orion P3 aircraft returning from an SAR task in Raratonga, and deviates little from planned return path. A Search Area Determination (SAD) uses a Last Known Position (LKP) for Nina based on Iridium data. This LKP is 230 miles East of the LKP given by the Nina crew on 4th June.

DAY 29: JUNE 26TH

RCCNZ search, Day 2. Radar search, at extended radar coverage up to 120nm either side of track, from Cape Reinga to Newcastle and return.

DAY 30: JUNE 27TH.

No search.

DAY 31: JUNE 28TH

RCCNZ search Day 3. Search of New Zealand Coast using Piper Chieftain.

Evening helicopter search of coast, for reported wreckage. Nothing found connected to Nina.

DAY 32: JUNE 29TH

RCCNZ search Day 4. Repeat of Helicopter Search, in daylight. No Nina wreckage found

DAY 33: JUNE 30TH

RCCNZ search Day 5. Search for life-raft, using Orion P3. SAD again based on Iridium LKP. Search area with sweep width of two miles.

RCCNZ Watch Leader, Comment on LKP: "The last transmission on the Iridium Satellite Phone is 33.83270 degrees South and 169.68940 degrees East this is Degrees and Decimal Degrees and translates to 33 50S and 169 41E in Degrees and Minutes which is what RCC Australia is transmitting. The position that you were given was a position reported by the crew to their Meteorological Contact of which we believe was either transmitted incorrectly or received incorrectly as it was passed on their SAT Phone of which we know the position as above. Everyone has been working off the same position which is the last transmission on the SAT phone."

DAY 34: JULY 1ST

RCCNZ search Day 6. Further search for life-raft with Orion P3. SAD again based on Iridium LKP. Small search area.

DAY 35: JULY 2ND

RCCNZ search Day 7. P3 Orion search, primarily visual, planned with 2-3 mile track spacing, but reduced to 1.2 nm due to weather. For the first time the LKP given by the crew was used for the SAD, though the search area was small and the logic for the particular search area unclear. It is assumed, but not stated, that this was a search for the life-raft (?) which could not be detected by radar. Radar was also used as a 'secondary' search method, but the area covered by this is not stated.

Day 37: July 4th.

RCCNZ search Day 8, and the last day of the search. This was an extensive Orion P3, primarily radar search (secondary visual, but weather poor), using a SAD determined using the crew's LKP. This was a good search area. Unfortunately, due to the circular currents in the Tasman Sea, and deficiencies in the previous radar search of adjacent areas on day 25, there is a strong possibility that Nina could have gone undetected by drifting in and out of search areas separated by 8 days.

Letter to RCCNZ from Curly Carswell. See Appendix 2

DAY 38: JULY 5TH.

RCCNZ suspended the search for the Nina with the statement "...in the absence of any further developments, the Director of Maritime New Zealand has accepted the recommendation to formally suspend the search."

"...the suspension means the search will be stood down unless any new information comes to light. However, broadcasts over Maritime Radio will remain in place, advising that the Nina is missing and asking other vessels to report any sightings. It is possible the search could be reactivated, if any significant new information comes to light."

DAY 41: JULY 8TH

Texas Equusearch contacted, to assist families in continuing the search

DAY 48: JULY 15TH

Satellite imagery provided by DMC International Imagery (DMCii). However, resolution was insufficient to enable Nina to be located, so the approach was discontinued.

DAY 57: JULY 24TH

Families contact Tomnod (Luke Barrington), who agrees to target satellites to search for Nina. First SAD suggested.

DAY 66: AUGUST 2ND

Tele-conference between Linda McFayden, Brett Pomainville, (both of USA State Department) Cherie Martinez, Ian and Sue Wootton. State Department agree to ask National Geospatial Intelligence Agency (NGA) to consider obtaining high resolution satellite pictures of a small area of the Tasman Sea (to be agreed).

DAY 67: AUGUST 3RD

First Digital Globe (Tomnod) satellite images taken within agreed search area.

DAY 69: AUGUST 5TH

Co-ordinates of suggested search area for satellite images sent to Joey Greer, for Senator Corker, for presentation to USA State Department/NGA, as agreed on 2nd August.

DAY 73: AUGUST 9TH

RCCNZ cease broadcast of messages to shipping, which had been sent 16 times a day for 69 days.

DAY 80: AUGUST 16TH

Possible life-raft image, seen on Tomnod map 123961, dated 3rd August.

It was located at 28.833728 S, 165.800661 E (decimal degrees).

DAY 81: AUGUST 17TH

Tomnod map 123961 image released to RCCNZ. RCCNZ are not impressed, request a better image, and state that it does not constitute sufficient information to restart any search.

DAY 93: AUGUST 29TH

Image of a boat seen on Tomnod map 396937, dated 3rd August. All involved in the search agree it is a boat. Located at 31.02 S, 167.73 E .

DAY 94: AUGUST 30TH

Tomnod map 396937 released to RCCNZ.

RCCNZ have "some doubts that it is a vessel, and suggest it may be a wave formation.

In light of this reply, Tomnod image, map 421592, is not even released to RCCNZ, as there is clearly no point in doing so.

DAY 111: SEPTEMBER 16TH

10:43 (22:43 September 15th GMT). Nina-size-and-shape image (called Lenore 62' boat) recorded on Tomnod Lat: 28.784317 S, Lon: 164.456063 E, ID 282. (Image not seen until 20th September).

DAY 115: SEPTEMBER 20TH

'Lenore 62' boat' seen on Tomnod by Lenore Psencik. Notified to TES and families.

DAY 116: SEPTEMBER 21ST

12:26 'Lenore 62' boat' image sent to RCCNZ by John Funnell.

DAY 118: SEPTEMBER 23RD

20:38 hrs. (02:38 USA Central Time) RCCNZ sent details of 'Boats on side' images, by Ralph Baird.

DAY 119: SEPTEMBER 24TH

Reply from RCCNZ to the 'Lenore 62 boat' and 'boats on side' images.

We do not believe the latest information from TES justifies resumption of the official search. To take a view on the images we would need to have a far greater level of detail as to the image source and the technical matters related to the image.

DAY 124: SEPTEMBER 29TH

TES search team uncover an Australian news report from December 2010:-

<http://www.abc.net.au/worldtoday/content/2010/s3094895.htm>

DEREK WOOLNER: "You probably had the worst of all possible conditions for a detection of what is in fact quite a small wooden boat. When you're looking for wooden boats they have low reflectivity for all sorts of radar systems and they can get lost in the wave troughs if the weather conditions deteriorate enough. They are very hard to find and if there's heavy cloud cover it's difficult to use other forms of detection, so all in all it's very hard task to go out and find a small fishing vessel."

Derek Woolner is a Visiting Fellow in the Strategic and Defence Studies Centre at the Australian National University.

Information then seen in Australia indicates that the detection range used in the radar search is far higher that can be expected to detect small wooden hulled fishing vessels, let alone the Nina.

"The company says the Sea Vue 2022 has a better power aperture, and so a better detection range against certain very small targets than the ELTA EL/M-2022 radar aboard the RAAF's AP-3C Orions; the Sea Vue 2022's 20KW transmitter and larger antenna mean it can detect even very small, wooden fishing boats in high sea states at ranges of up to 50 nautical miles, the toughest of all the targets sought by Coastwatch."

<http://www.australiandefence.com.au/2F938740-F807-11DD-8DFE0050568C22C9>

DAY 140: OCTOBER 15TH

Request made to RCCNZ to consider additional information given about the satellite images, and reconsider the image of 15th as giving new information sufficient to resume the search for Nina.

Nigel, RE: RCC0401/13 SAR SITREP THIRTEEN, New Information, TES Sailing Vessel-C

Urgent request based on new information: We have continued to use American technical private resources to search for the subject schooner Nina and we provided RCCNZ with new information on September 20 and September 22 to review and comment upon. As we have stated before, we have been able to task overhead earth satellites to take digital photographs of the Tasman Sea open waters. Our hope was that you and your advisors would see exactly what our team sees as a likely image of the schooner Nina and we anticipated RCCNZ would wish to utilize this new information. We received your reply dated 24 September 2013 and were disappointed RCCNZ failed to accept the new information showing a vessel. Now, we feel it necessary to point out that this is new information and with respect, urge you to reconsider reinstating an active search for the schooner Nina.

Attached is the overhead satellite image obtained on/about your local NZ noon-time September 16. We have made efforts to re-image the subject vessel using similar technology to what successfully displays the ship the size and shape of the schooner Nina in the attached file. Time is not in our favor and we feel more effort is urgently needed to verify the vessel as the schooner Nina.

The lack of a wake of the vessel suggests it is adrift and not under power as we expect the Nina to be doing so if she were without sail. Please quickly determine your interest in continuing the search for the Nina starting with the new information that the schooner Nina was afloat on 16 September at the coordinate of the vessel in the image which is now the assumed last known position of the schooner Nina, 15 September 2013, 22:43UTC (10:43 local time NZ, 16 September 2013):

Latitude: 28-47-04 S Longitude: 164-27-22 E

Attached also is a montage of the given image above and two models of the schooner Nina: (1) engineering drawing and (2) pixilated version of the engineering drawing to match the resolution of the earth satellite image to show the match of length and characteristics of the model and the image recorded and included here.

We are using both WorldView-1 and -2 and QuickBird satellites (operated by a specialist team at DigitalGlobe in Longmont, Colorado USA) on this team effort to search for the schooner Nina. The image was captured after we tasked the earth satellite named QuickBird to cover the area of interest to search for the schooner Nina. QuickBird has a lower resolution than WorldView assets. The resolution of QuickBird is designed to be 60cm. Here is a link to the DigitalGlobe/Tomnod image on the collaboration website of now 13,000 registered volunteers searching for a second look of the Nina:

<http://www.tomnod.com/nod/challenge/ninarescue2/map/1014398>

A more complete discussion of satellite technology and the design of those earth satellites we are using in the Tasman Sea are in the attached PDF file by the satellite owner/operator DigitalGlobe, Inc.

We would appreciate an urgent response to this request. Thank you for all you do, Regards,
Ralph Baird and Jerry Borrer

DAY 149: OCTOBER 24TH

Nigel Clifford replies on the subject of the September 16th satellite image.

“As per your requests and as promised in my e mail response of 15 October, RCCNZ has reviewed the images provided to us by TES which were accompanied by a request to consider these as ‘new information’ and as sufficient evidence to consider re-commencing the NZ authorities search for the SV Nina.

- The review of the images has been comprehensive and thorough. Through a partnership arrangement with New Zealand Defence Force specialists, full copies of the original images have been obtained (the images sent to us were not in the original format and there were some losses of resolution in those images). The images have subsequently been analysed by technical specialists in the field of satellite imagery analysis.

- The conclusion is that the resolution of the images is insufficient to draw an unequivocal determination of the identified feature but, after exhaustive analysis, it is considered very unlikely that the object is the SV Nina. Shadow and highlight details of the object have been compared to known points on the SV Nina and there is little or no correlation.

- I am sorry that I cannot offer a more positive outcome but given this specialised analysis of the original images RCCNZ remains of the view that there is insufficient justification in these images to support renewed active searching by New Zealand authorities.”

Appendix 2

Letter to RCCNZ from Curly Carswell, 4th July

"I am Curly Carswell the Partner of Evi Nemeth one of the missing Nina Crew. I consider myself an Experienced Yachtsman and a Yacht Delivery Skipper, I have undertaken a number of single handed ocean passages and have recently crossed the Pacific Single handed, I have sailed with Evi for many thousands of miles and even done a Yacht Delivery with her from Tonga to Brisbane Australia. I know Evi very well not just personally but here as a fellow yachtsperson who is attentive, unflappable and professional in every regard at sea.

I am who I say I am, so please check me out with Laz Nemeth and Libby the 2 young people who have been representing all the families of Nina and me at RCC NZ. I haven't spoken up direct to you as I was trusting your judgment, your old records will show I have worked long-side you on S&R in the Fiji Islands a number of times I am based in Savusavu and am well known Internationally.

On the 03 of July 2013 exactly one month after the storm that disabled Nina you chose to be brutally candid with the two young people above. They reported to a few of us Family your comments and asked we did not circulate this;-

Quote"-Yesterday Wednesday the 3rd didn't go well. With all the information they (nz rcc) have they are looking at stopping the air search.

Cold hard facts (and nz rcc opinion):1) If Nina is intact they have 3 possible ways to communicate and have not communicated.

2) if they are in a life raft the high probability areas have been visually searched (not all but the high value areas)

3) If they are in the water unprotected from an event on the 4th of June they are dead.

Nz rcc considers a catastrophic event on the 4th the most likely event, and that Nina sunk.

I have been and continue to argue for "Nina is intact but disabled and drifting from Evi's last position report to the north west". Nz rcc response is if the Nina is intact they should set off the EPIRB because they should know a search will be underway by now for them. My response and what I continue to argue is "we are talking a male captain that is of the personality type to only use an EPIRB if the vessel is actually sinking, he would not use it for something as trivial as a position report" Unquote

I fully endorse Laz's comments, the SPOT in my opinion is a toy when considering ocean passage use and further more Evi had trouble with her Spot on other passages one being to NZ-you can't say it is a serious method of

Communications. The Iridium is prone to antenna damage and is not waterproof so in the conditions Nina was in and running down wind where there would be no protection at all in the Cockpit from rain nor sea water I can easily see the Iridium failing, which leaves the EPIRB. I dispute your assumption based on what we know that Nina suffered a catastrophic failure and Sunk-Following are comments from a Naval Architect on this subject.

I have worked on Nina twice, once in Galapagos and the second time in 2011 in Neiafu Tonga. I seem to recall the EPIRB was located just inside the companionway to Stb where there was a bunk, that attracted lots of gear torches, hand held, cell phones etc the small companion way doors hinged out.

RCC NZ has an incredibly good International Reputation up to date however I wish to convey to all of you at RCCNZ that I and many others consider you will have betrayed the trust of the of Nina's crew and the wider yachting community should you stop searching now.

You have a job I would find difficult to perform but you are Professionals. You have failed Nina's crew and families already 4 specific times, do not make a fifth failure and stop searching where in all probability it is you that have been searching the wrong area until yesterday.

As you were on the 03 July brutally honest in your views to our young reps, let me in turn convey to you what we consider the 5 specific RCC NZ failures to be;

1] Despite being notified and being given a huge volume of information by us, the families and friends, between the [09Jun Amsa] 10Jun RCC NZ] (**Note: CC later agrees (26-02-2014) that this contact to RCCNZ was not made until 14th June, although he contacted yachting friends in Opuia on 10th, and it was discussed locally.**) you folks decided for some obscure reason only to make Radio calls till the 25 June when we were told Nina would arrive in Australia!!!! Time has proved this to be a the first of your grave mistakes and this was with the full knowledge that Nina had gone thru a severe storm on the 03 and 04 Jun, we had provided you with last known positions of Nina and a heap of Information including weather info from Bob Mc Davitt.

2] On the 19 Jun 13 we the family were advised via contacts that the Water Police reported Nina had been found and were only 5 days out of New Castle, that they would arrive on the 25 Jun...This was next day found to be false and the families were devastated. It is too much of a coincidence that NZ RCC had the same date as a magical arrival date, it is obvious that the two are related, this was an unforgivable breach in Public Relations by search and rescue.

3] You report on 15 Jun 13 that you approached Iridium and gained a Position report from them. Now if you knew this was possible please explain why you were not aware that Iridium Sat Phones had a very doubtful position reporting capability, which is well reported and Documented on Internet. It is also I understand a point Iridium has advised these limitations of their position reporting. Sorry but there can be no excuse for this oversight when lives are at risk.

4] To compound the failure in para 3] above you then used this erroneous position to base all your search's which meant you in all probability were searching in the wrong places, and not the area that you should have been searching. You ignored the position given by Evi on Nina saying it was incorrect. Let me inform you Evi was so meticulous with Navigation she was a pain in the butt, she taught Mathematics at University level, her memory was frightening; there was no mistake - she was unflappable in emergencies. We furthermore had asked Bob Mc Davitt to check and recheck his findings re the weather in the two locations all this was passed to you. Bob supported our argument that Evi's text position was the correct last known position for Nina, a position that if you had used it you would have searched in different areas.

The final Negative point regarding the Search for Nina must be the Iridium Policy of disclosure when lives are at risk. This factor I am sure will go Viral around the world as soon as it is released, bringing with it world attention back to the Nina search, does RCC NZ want to be found wanting?

Gentlemen and Ladies of RCC NZ , the crew of Nina deserve better, they are human, you are human we all make mistakes the true great people of our world are the ones who accept being wrong and will take immediate steps to put the wrong right, you have that opportunity by continuing to search those areas to the Northwest that you have not searched perhaps all the way to the Australian coast.

Involve the Australia Search and Rescue. To date, all they have been asked to do is use the radio. They have Orions available as well, allow them to do coastal searches out to Lord Howe Island to overlap where the NZ Orions have searched. It appears to the outside world that NZ SAR doesn't want assistance from their closest neighbour in the search. Why not utilize ALL of the resources available, especially now that so much time has been wasted.

Simply you owe the Nina crew and their families to do these last few days of searching, once the area is covered your task will be honourably completed...

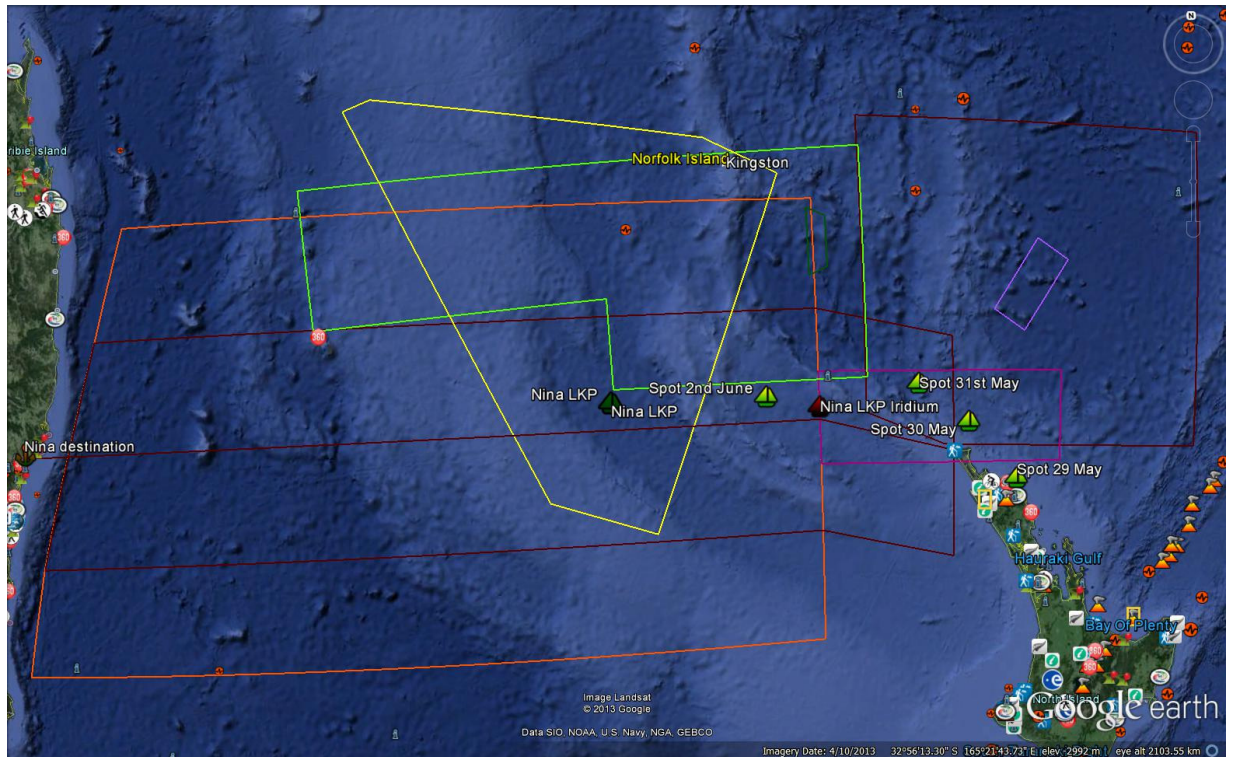
Thank you for your time and all your hard work, don't for a minute think it is not appreciated, by all mariners.

Yours sincerely

Curly Carswell

Appendix 3

Search Areas

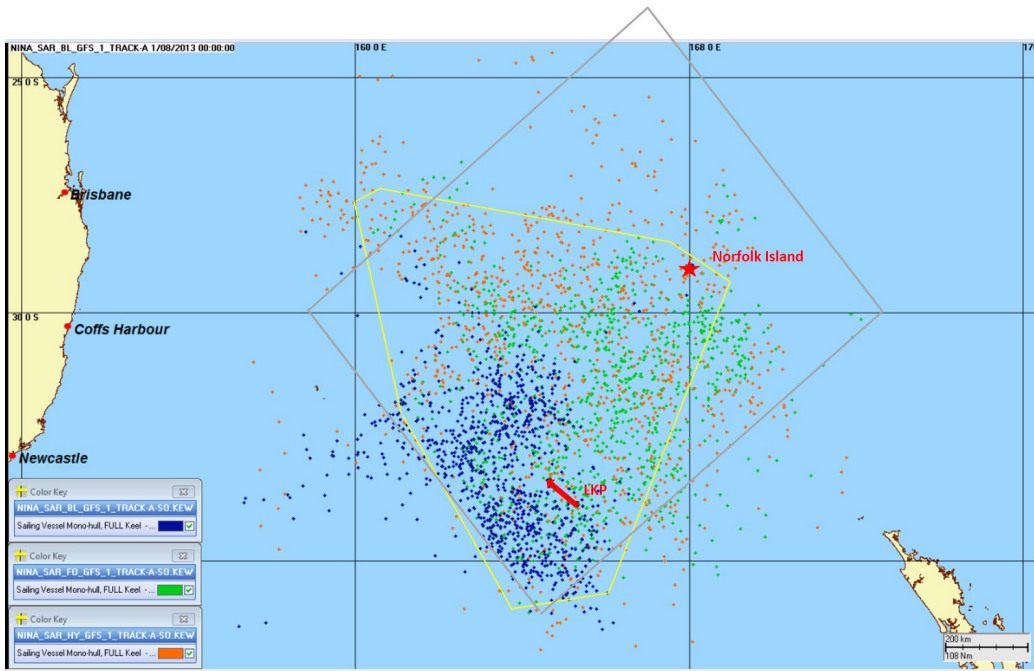


The yellow polygon is an area of greatest probability, determined by Australian company ASA on 4th August 2013, using 3 separate models.

The extensive red and orange box shows the Day 2 (June 26th) search; 60nm radar range in red; 120 nm range in orange. A large proportion of this 'search area' is outside likely drift patterns for the Nina, particularly given the likely effective radar range as <60nm.

The green area shows the Day 8 search. This is better targeted (it used the crew's LKP). But the circular currents of the Tasman mean that Nina could have drifted South outside this search box, in the 9 days separating the Day 2 and Day 8 searches. The graphic below shows that one of the drift models has a high proportion of drift points South of the Day 8 search area.

The remaining areas were all based on the Iridium LKP, and are highly unlikely positions for the Nina.



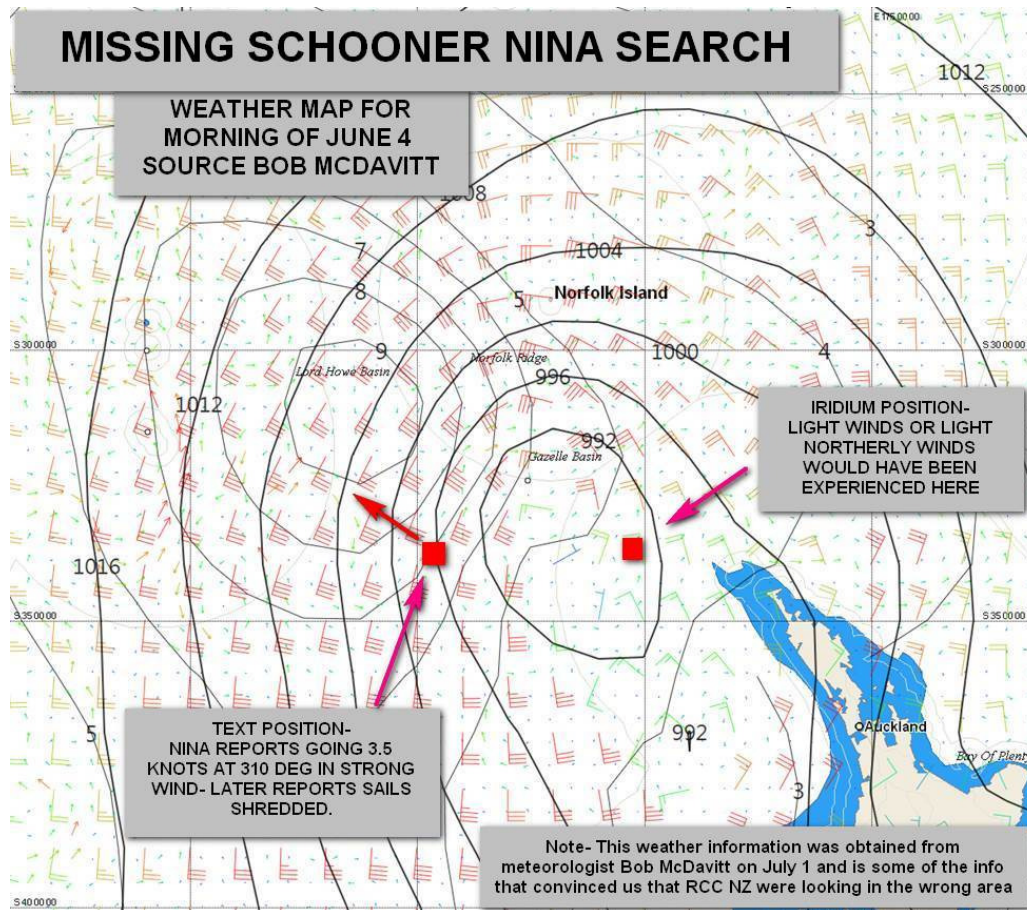
Search areas generated from ASA SARMAP combined analysis using 3 sea current models.

Rectangle is RCCNZ proposed search area, 22nd July 2013

Appendix 4

Weather map

This map, sourced from weatherman Bob McDavitt, has been annotated by experienced sailors Curly Carswell and Paul Wilson. (Partner, and friend, of Evi Nemeth).



Appendix 5

The Crew

The Dyche Family Ages 57, 63 and 1

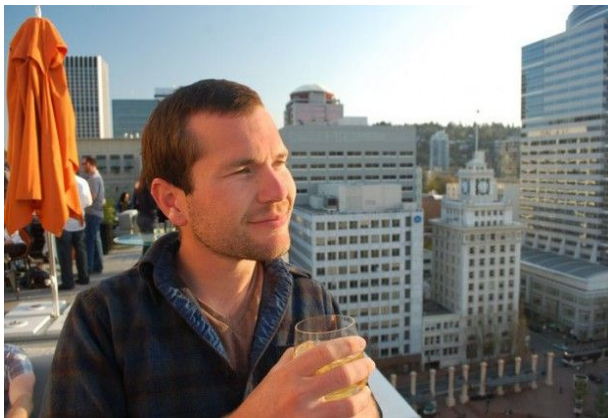


David Dyche III was the youngest tug boat captain to be licensed in the state of Ohio. He works with Edison Choust out of Louisiana, and has been based in Brazil. He is a captain on their 250 ft. anchor boats. He bought the Nina in 1988. Over the years he has completely overhauled her, with repairs and renovations ongoing.

David married Rosemary in 1992. She was born and raised in the mid-West and she is very resourceful. She had her own sailboat, so she was no stranger to sailing.

Davy, Capt. David and Rosemary's son, was born July 1995. Davy's been raised most of his 18 years living and traveling the world on Nina. He is extremely mechanical when it has anything to do with boats.

Kyle Jackson Age 27



Kyle thrives on adventure, but also knows how to take care of himself and others in difficult situations. Most of his childhood was spent living on cattle ranches where he developed a love and adventure for the outdoors. He and his sisters would often spend all day exploring surrounding woodlands or the canyons of the Niobrara River. After graduation Kyle completed a Wilderness First Responder certification and worked as a river guide in Moab, Utah with Red River Adventures. Since then he has been doing seasonal outdoor work in recreation, conservation, and environmental education.

Through all his adventures and job opportunities Kyle has learned many valuable life-saving skills. He is strong not only physically, but also mentally. He has a spirit that inspires others.

Evi Nemeth Age 73



Evi Nemeth is a woman that lives life for the experiences. She has been around boats for over 40 years. She has crossed the Atlantic Ocean and survived a variety of conditions. She is an expert fisherman, great swimmer and has a very strong will. She is a strong woman; a woman who knows how to survive. She has travelled around the world and lives to share her experiences with others. She retired a few years ago and went off to live on her boat.

Evi may be 73 years old, but she is far from elderly. Two years ago she reroofed her own roof, and she is quite handy with a chain saw when cutting up fallen trees. Evi works circles around everyone else. She's a very strong and capable sailor.

Before retirement, Evi was a college professor in Computer Science. She played a huge role in shaping USENIX, the Advanced Computing Systems Association, writing about network and system administration. She was a legend and a godmother to a generation of UNIX 'sysadmins.'

Matthew Wootton Age 35



Matthew is an environmentalist, elected at a young age to the UK Green Party National Executive. But in January 2010 he started travelling, Travelling solo, with backpack, computer and camera, and avoiding flying for environmental reasons, he made his way by boat, car, bus, and train to and across North and Central America, then to most countries in South America, meeting, mixing and living with locals wherever possible.

Before joining Nina, he had sailed from Panama to Columbia, taken a container ship to Tahiti, sailed from Tahiti to New Zealand, and cycled around the South Island. He is independent and extremely determined.

Danielle Wright Age 19



Danielle grew up on a farm surrounded by animals with abundant opportunities to learn and explore. At 6, she could climb the tallest trees, milk the goats, and take care of feeding the animals. Her real passion was horseback riding, and by age 8, she could swing herself up on her horse and take off at break-neck speed. Danielle has been sailing on family vacations since she was 9 months old. When she was 15, Mum and Dad sold everything to take the family on a 2 year sabbatical in the Caribbean aboard a sailboat. They met the Dyches' in Panama and spent about 2 months with them before the Dyches' took Nina through the Panama Canal to Costa Rica, while the Wright's went in the opposite direction.

Appendix 6

The Iridium, Spot and text positions

This graphic shows the random nature of Iridium positions, compared with the logical progression of Spot and text positions.

