

BOUVET (3YØZ)-2018



Bob Allphin K4UEE
Nov. 13, 2018

So close we could almost touch her!
BUT IT WAS NOT TO BE....



Here's what we are going to do today:

- Tell the 3YØZ story with some extraordinary photos
- Discuss our Due Diligence (vetting) process
- What have we learned?
- Another attempt?
- Planned refund of our remaining funds to our contributors
- Personal observations

APOLLO 13 REVISITED?

There are some similarities.....

After a long string of successes. maybe we were due for a failure:

AH1A #8

VKØIR #4 (2 attempts)

A52A #3

VP8THU #6

VP8GEO #10

3YØX #4 (2 attempts)

VU7RG #2

K5D #6

PJ6A-new one

HKØNA #12

FT5ZM #4

KIN #2

TEAM MEMBER INVESTMENT

- Travel - \$2000 - \$3000
- Hotel/meals - \$550
- Team share \$18,500
- Clothing and baggage - \$1500 - \$2000
- Each person invested at least \$22,500 and as much as \$25,000

AND.... 31 DAYS AT SEA
IN THE SOUTHERN OCEAN!

Nice Hotel – 3 nights



NOT SO NICE HOSTEL -6 NIGHTS







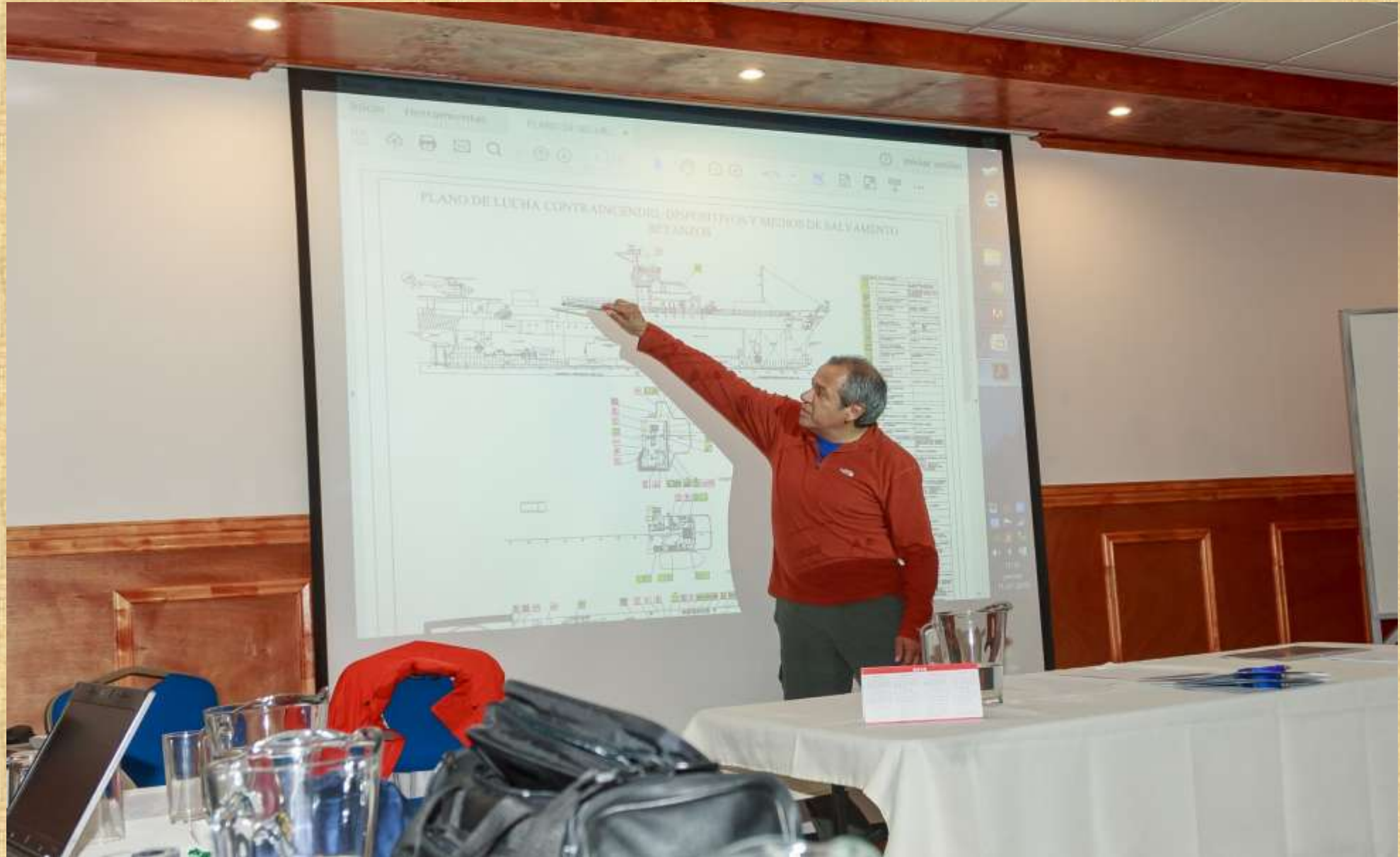
BUT, WE MANAGED TO PASS THE TIME.....





CREW AND SAFETY TRAINING...2 DAYS

















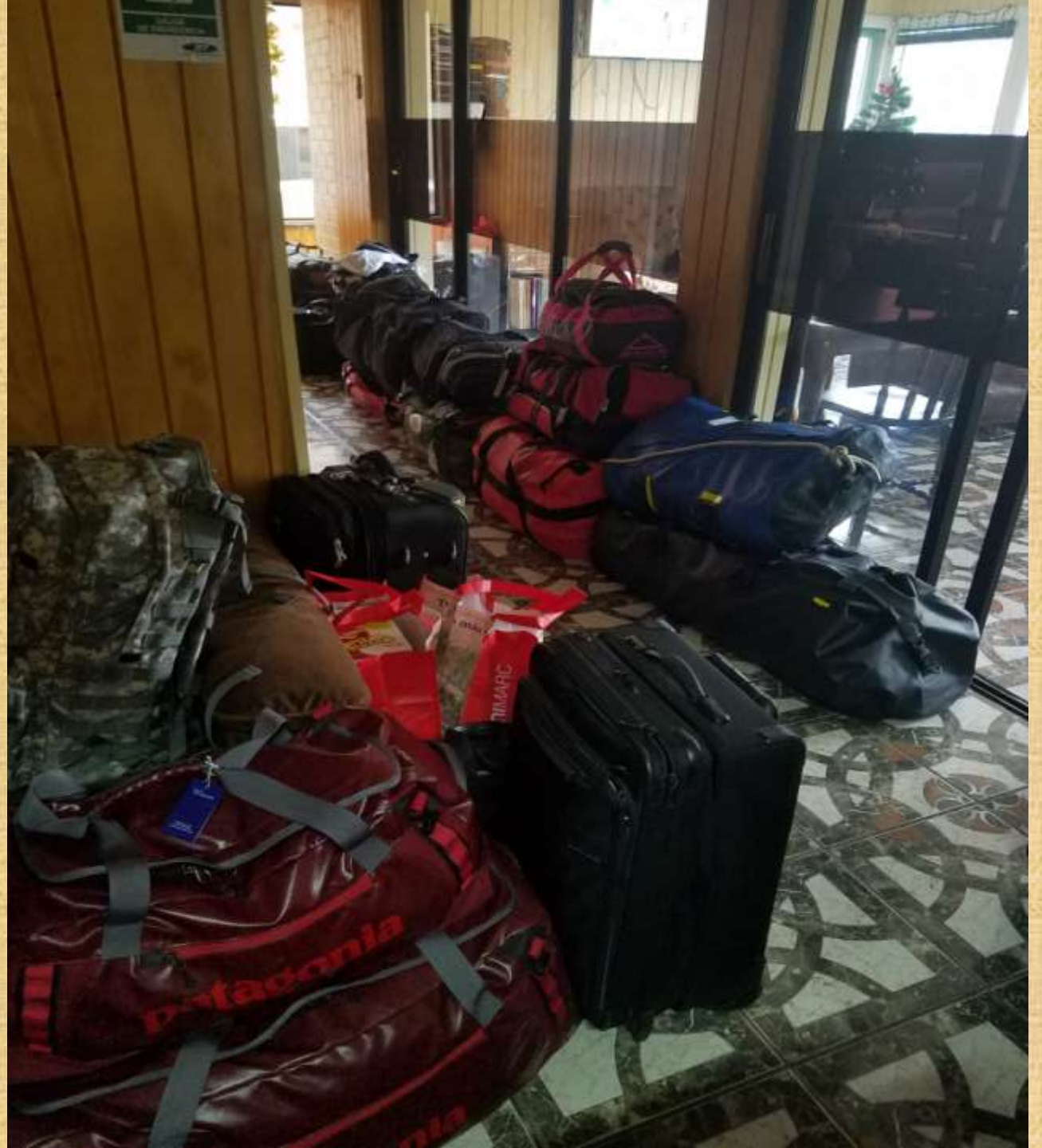


**FINALLY, THE TIME
COMES...5 DAYS LATE**

ALL PERMITS RECEIVED!

Added cost from delay:

- Food-personal exp.
- Hotel paid by DAP



M/V BETANZOS (VALPARAISO, CHILE)





BETANZOS

DAP

DEVELOPING ANTARCTIC PROJECTS

52
50
48
46
44
42
40
38
36

ETB
61101P





SIX 20 man life rafts



5



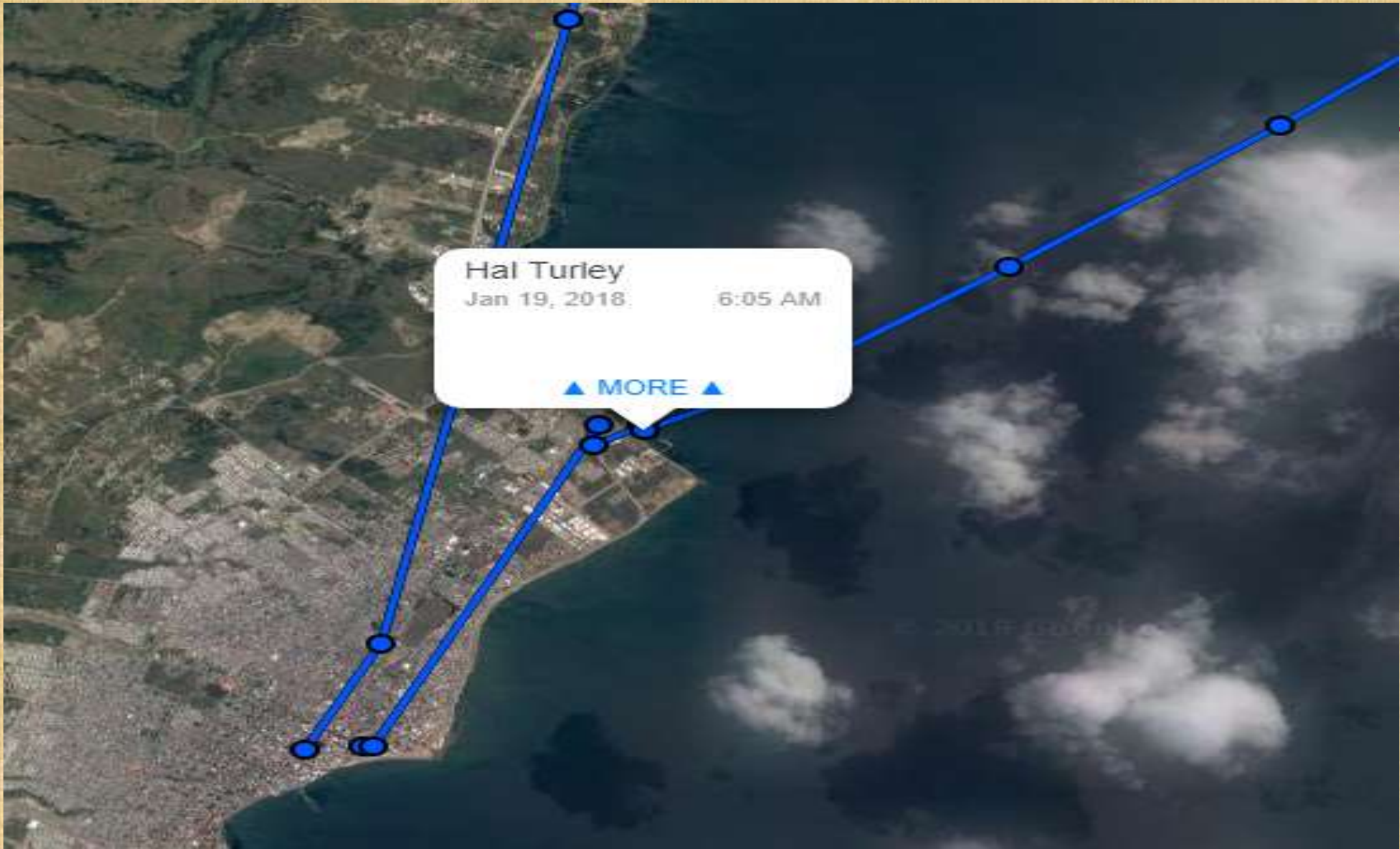








FINALLY SET SAIL--JANUARY 19, 2018



Underway...through the Straights of Magellan



LET'S "GIT ER DONE!"





















ZYØZ

BOUVET ISLAND

945111817132216262127637122352612122611
2312171968141520415246937104031251012353



31140
BOUVET ISLAND 2011
ZYØZ





3G9A/MM QSOS BY OPERATOR

Operator	CW	FT8	LSB	RTTY	USB	Tot	Accum
		2701				2701	2701
3G9A	64					64	2765
EY8MM	49					49	2814
HA5AO	68					68	2882
JR4OZR	153					153	3035
K0IR	1109					1109	4144
K4UEE	669					669	4813
K9CT	100					100	4913
LA6VM	75					75	4988
N6HC	501					501	5489
N9TK	1643			5	1	1649	7138
NM1Y	225			37	1	263	7401
PA5M	255					255	7656
SM5AQD	182					182	7838
VE7KW	656					656	8494
W6LZT	492					492	8986
W7IV	2		1	134		137	9123
W8HC	368					368	9491
WB9Z	844			10		854	10345
Total	7455	2701	1	186	2	10345	10345

3G9A/MM QSOS BY BAND & MODE

Band	CW	FT8	LSB	RTTY	USB	Tot	Accum
5		123				123	123
7	3229	379	1	131		3740	3863
10		3				3	3866
14	2975	1159		53	2	4189	8055
18	615	51				666	8721
21	636	986		2		1624	10345
Total	7455	2701	1	186	2	10345	10345







MAKING GOOD TIME AND PAST FALKLAND ISLANDS—CALM SEAS



COMMERSON'S DOLPHIN...has sharply-delineated **black-and-white** patterning and is found around the tip of South America....Wikipedia



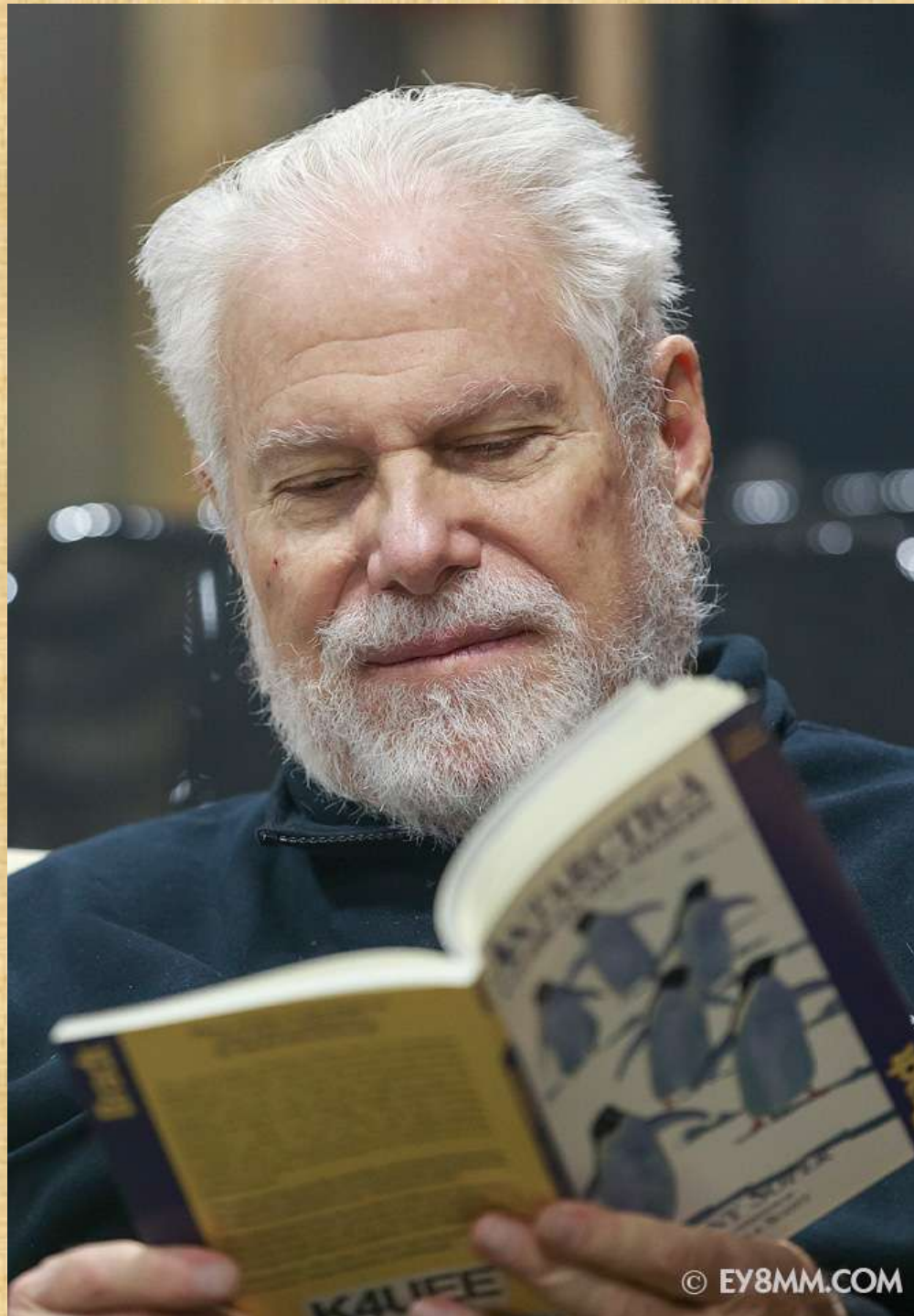








ARNIE-N6HC



JIM- N9TK



HAL-JR4OZR



PISTA-HA5AO



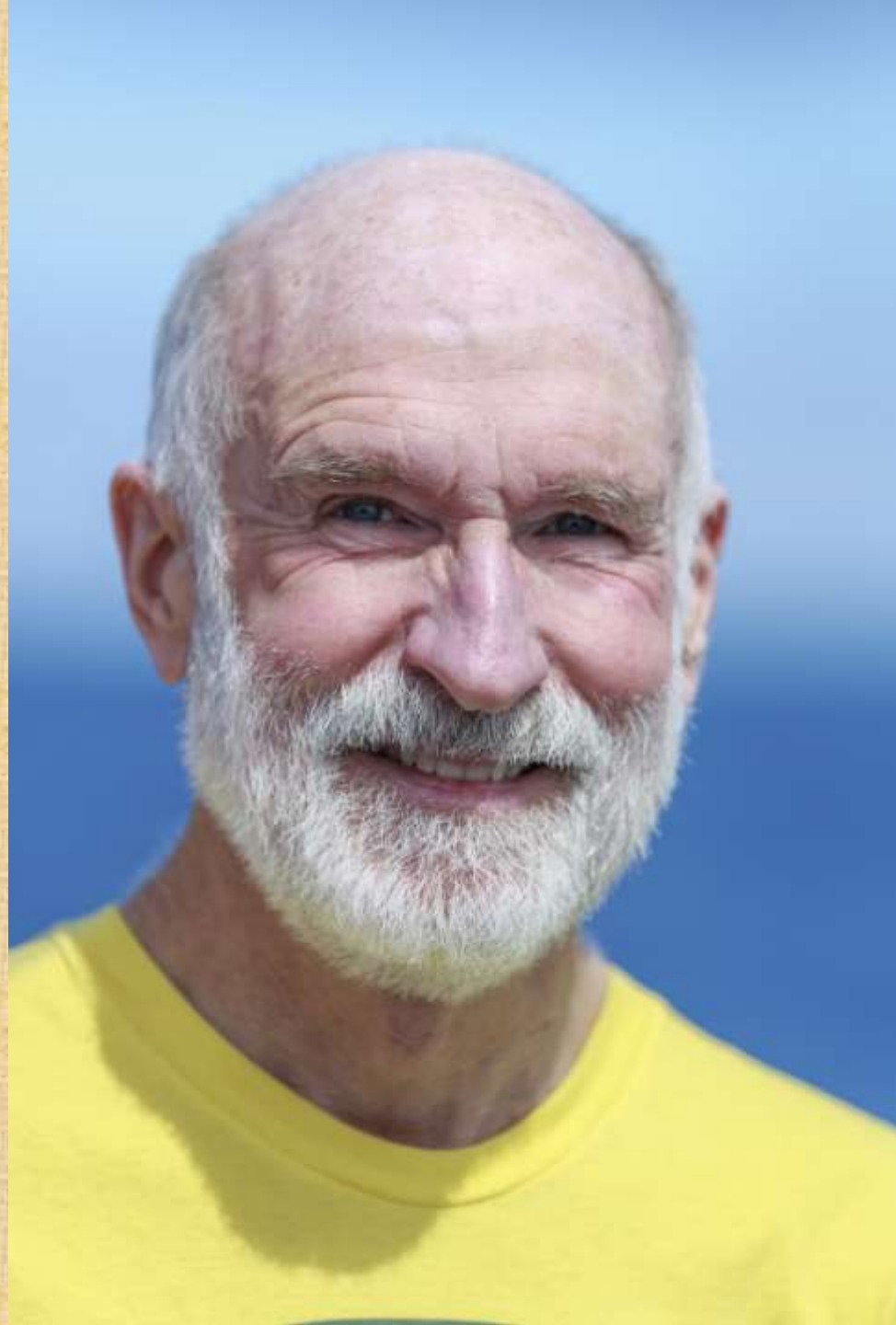
MIKE-PA5M



JUST-LA9DL



CRAIG-K9CT



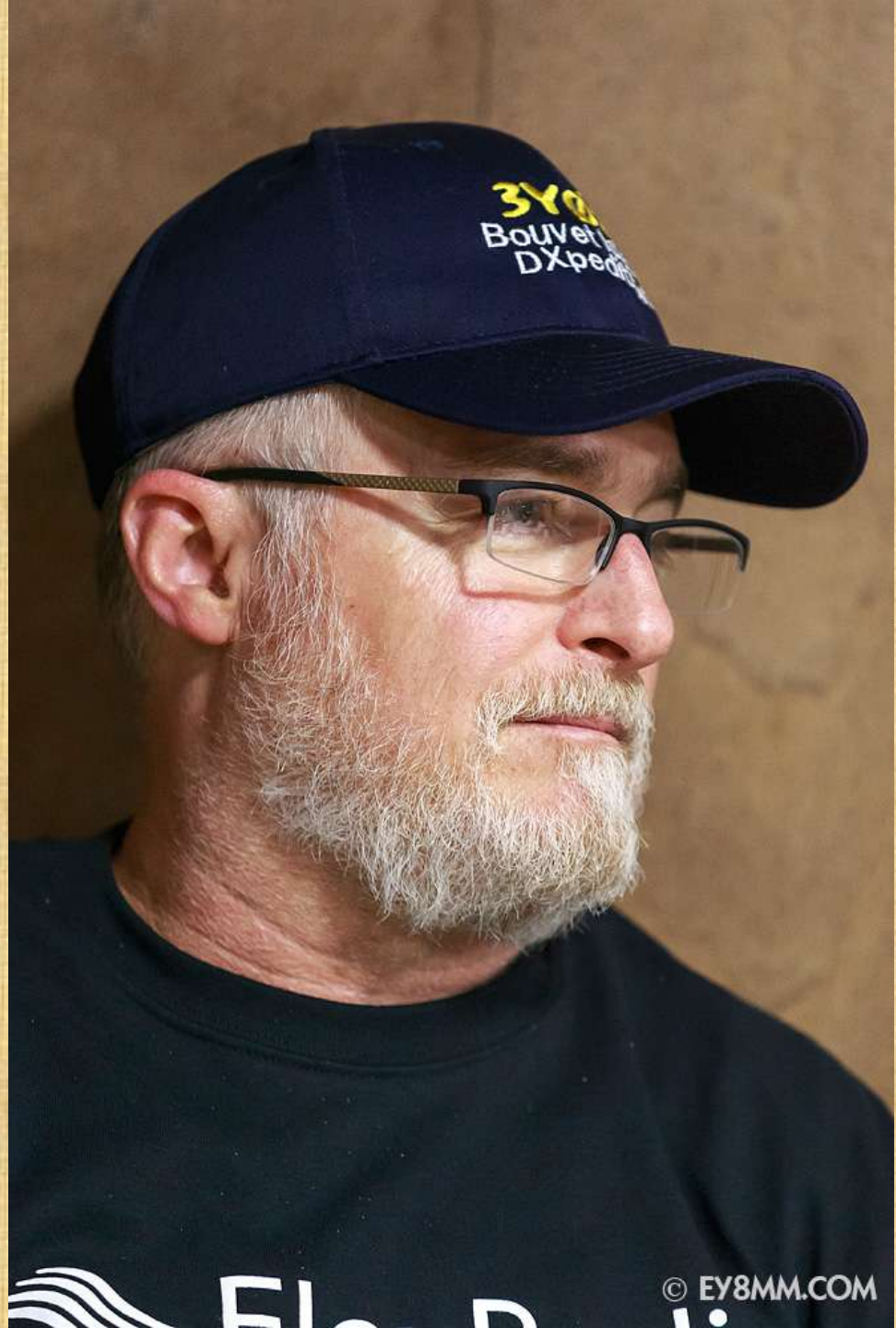
KEITH-VE7KW



PAUL-W7IV



JEFF-NMIY



JERRY-WB9Z



HAL-W8HC



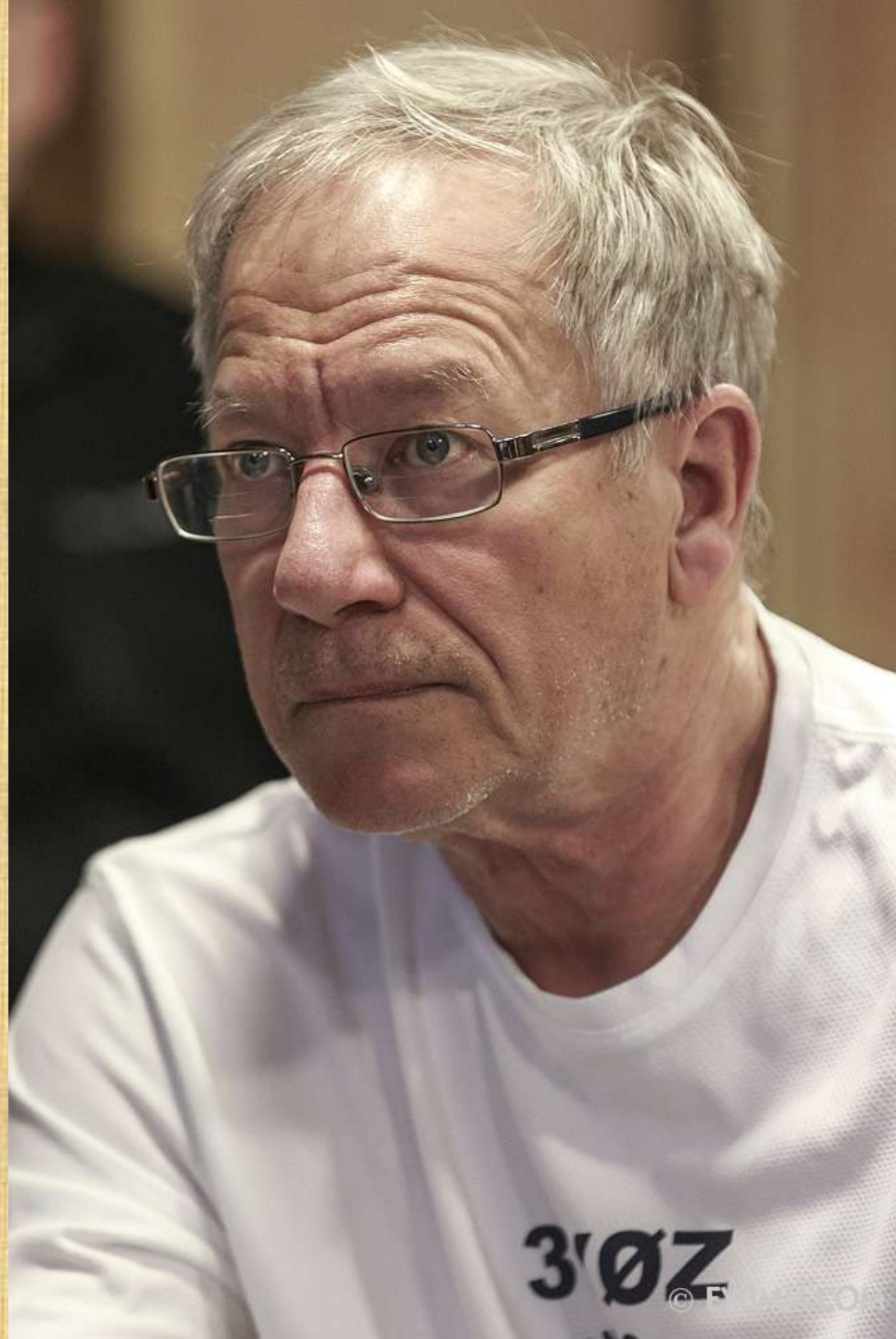
ALEJO-OUR GUIDE



GLENN-W0GJ



RALPH-KOIR



HAWK-SM5AQD



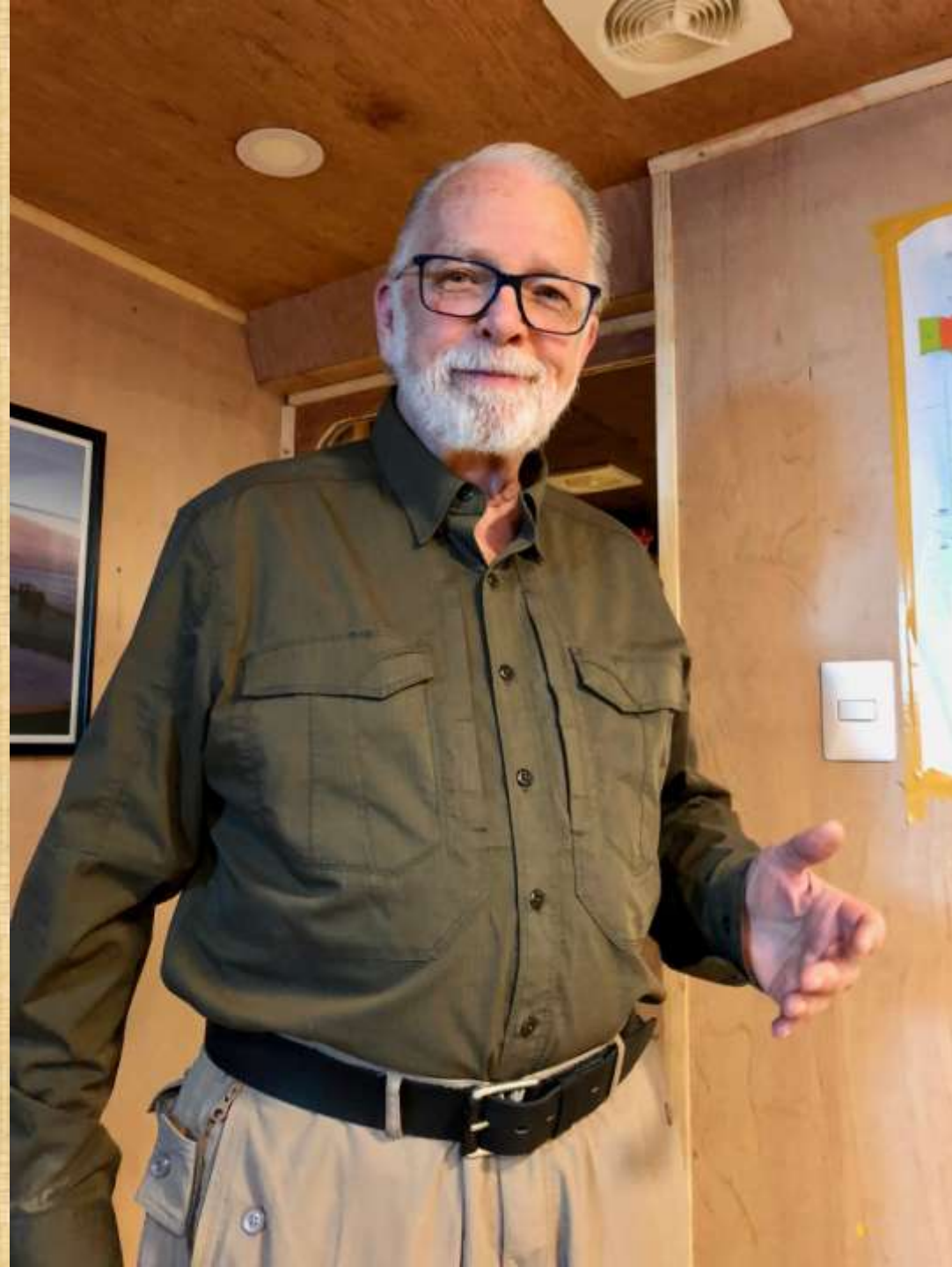
BOB-K4UEE



ERLING-LA6VM



GEORGE-N4GRN



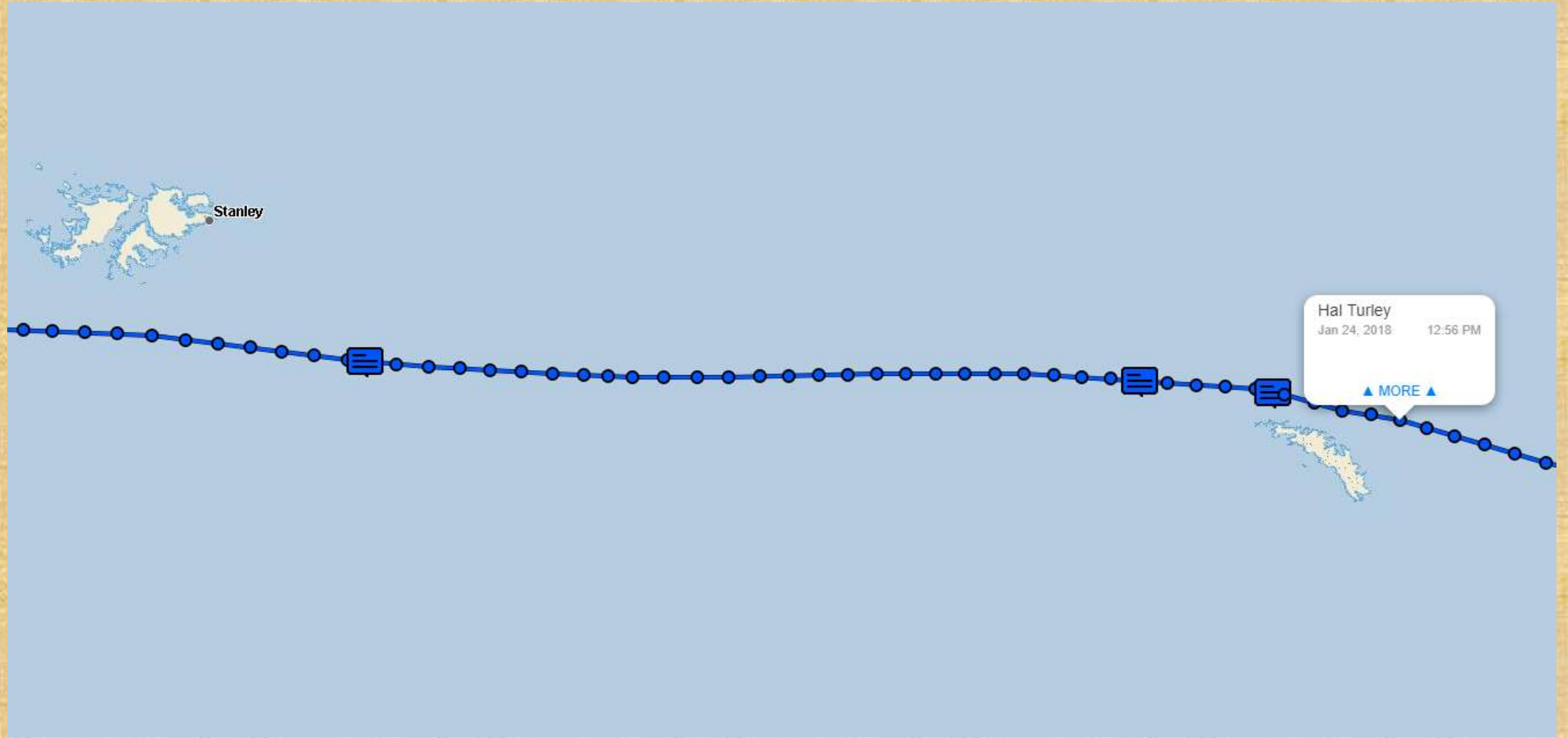
GREGG-W6IZT



NODIR-EY8MM



SOUTH GEORGIA ISLAND







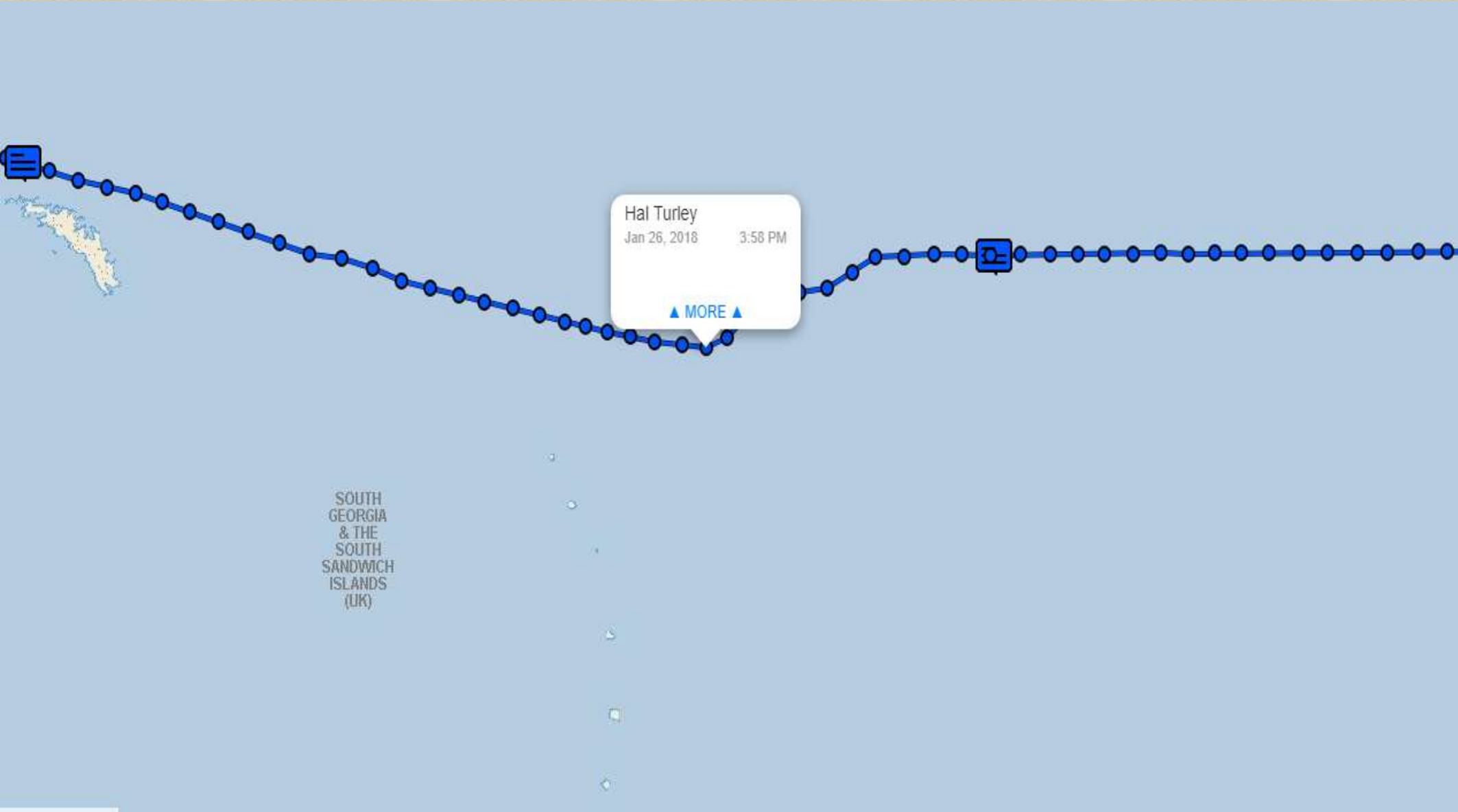








ALTER TRACK TO AVOID PACK ICE FLOES















ARRIVAL AT BOUVET JANUARY 31, 2018 (12 DAYS TRANSIT)

Hal Turley

Jan 30, 2018

10:59:15 PM

Speed: 10.86 mph

Course: E

Elevation: -25.56 ft.

Lat: -54.481748

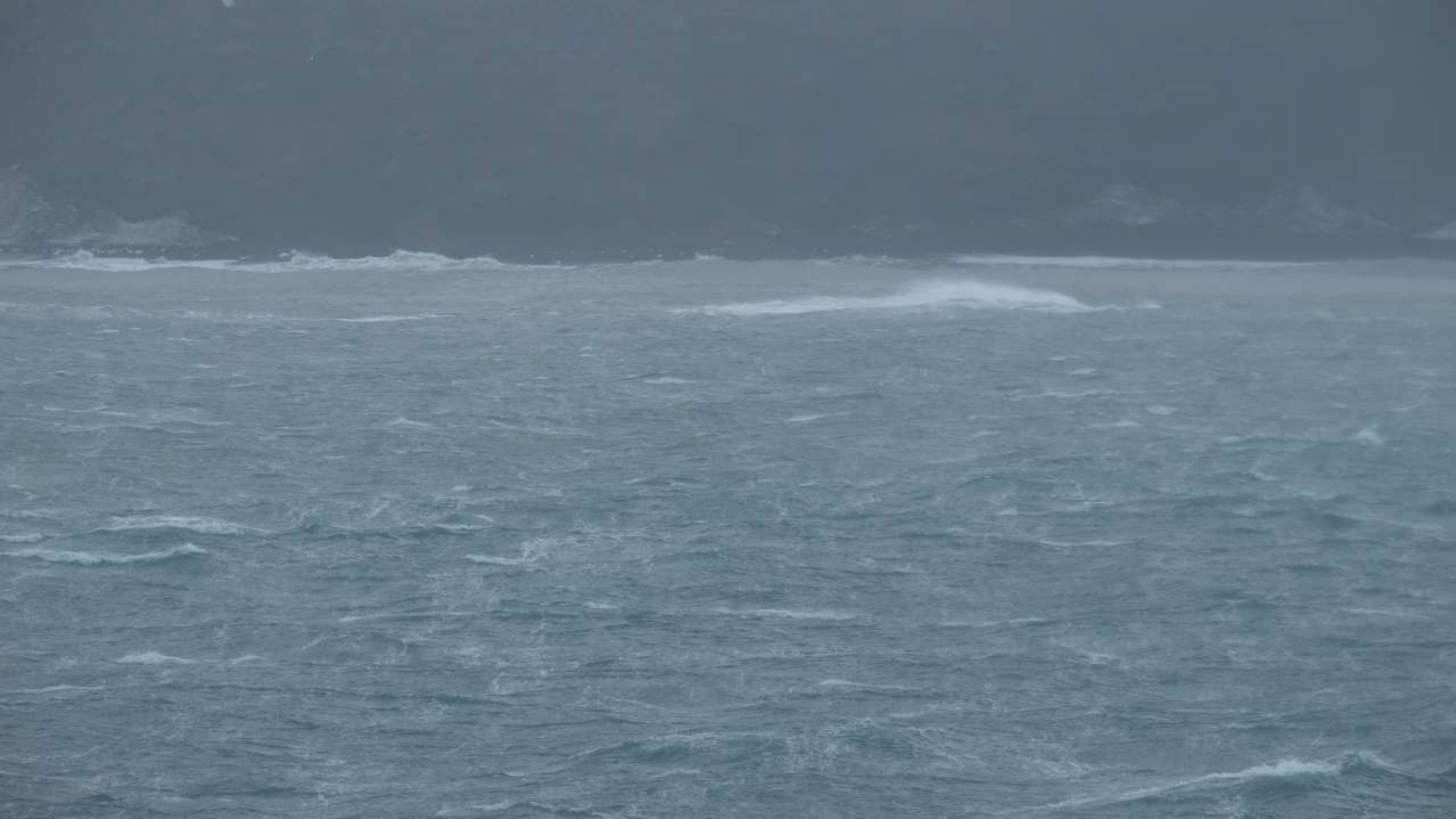
Lon: 2.965771

▼ LESS ▼



Hour after Hour...wind, snow, sleet, clouds,
overcast, fog and no contrast between the
glacier snow and the sky.....no fly WX !













Note the fog sweeping across the helo landing area in the next few pictures....











We held numerous meetings
with the helo pilots.....



It became obvious the pilots were were “spooked” by:

The WX

The infrequent and short flying windows

The large amount of stuff we had to get ashore!

incl: 14 radios/amps + antennas/masts

8-6500kw gensets

5 shelters

23 men, food, water, gas + personal gear

The high winds and “roll” of the boat





We modified our plan to:

- Reduce the size and scope of the planned operation
- Reduce the amount of stuff going ashore.
- Adopted a MVC approach (minimum viable configuration)
 - like Navassa KIN)
- Stage on and stage off concept
- Ralph briefed the team



Basic Safety Information
ET-1000-001-0000-0000

NO.	DESCRIPTION	STATUS
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Recon Flight

Alejo, Nodir, Ralph and emergency gear.
Select site, evaluate surface, anchorage
Spot Sleep C and 240-60 degree line
Call for next flights
Helo "B" spins up
Helo "A" returns for Chileans and George









WE practiced erecting a shelter





Meanwhile outside...
















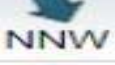







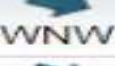

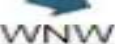

The wind blew and blew !



FEBRUARY 2

- Clouds & fog moved in all day
- Winds picked up at sunset
- Gale-force-plus winds predicted next four days
- Anchors (2) could not hold position

The next 24 sure don't look good for moving onto the rock.

Day	Local Time	Dir	Speed/ Gust	Temp/ Feels Like	Humidity	Pressure	Cloud Amount	Precip Amount	Weather
Sat 03 Feb	00:00	 WNW	26 / 50 mph	35 / 22°F	96%	992 mb	99%	0.01 In	
	03:00	 W	25 / 50 mph	34 / 21°F	93%	993 mb	100%	0.00 In	
	06:00	 W	25 / 49 mph	34 / 21°F	91%	994 mb	75%	0.00 In	
	09:00	 W	24 / 38 mph	35 / 23°F	90%	995 mb	93%	0.00 In	
	12:00	 WNW	21 / 28 mph	37 / 26°F	92%	995 mb	70%	0.00 In	
	15:00	 WNW	23 / 30 mph	38 / 27°F	95%	993 mb	100%	0.00 In	
	18:00	 NW	22 / 33 mph	37 / 26°F	96%	991 mb	100%	0.00 In	
	21:00	 NNW	20 / 40 mph	36 / 25°F	98%	988 mb	100%	0.01 In	
Sun 04 Feb	00:00	 NNW	24 / 50 mph	31 / 18°F	97%	984 mb	100%	0.01 In	
	03:00	 N	28 / 58 mph	31 / 17°F	97%	977 mb	100%	0.02 In	
	06:00	 NNW	36 / 75 mph	31 / 16°F	95%	970 mb	100%	0.22 In	
	09:00	 NW	31 / 65 mph	31 / 17°F	94%	967 mb	100%	0.02 In	
	12:00	 W	27 / 57 mph	31 / 17°F	94%	967 mb	100%	0.01 In	
	15:00	 WNW	24 / 51 mph	31 / 18°F	91%	968 mb	98%	0.00 In	
	18:00	 WNW	28 / 60 mph	31 / 17°F	92%	967 mb	100%	0.00 In	
	21:00	 WNW	30 / 62 mph	31 / 17°F	88%	967 mb	100%	0.01 In	





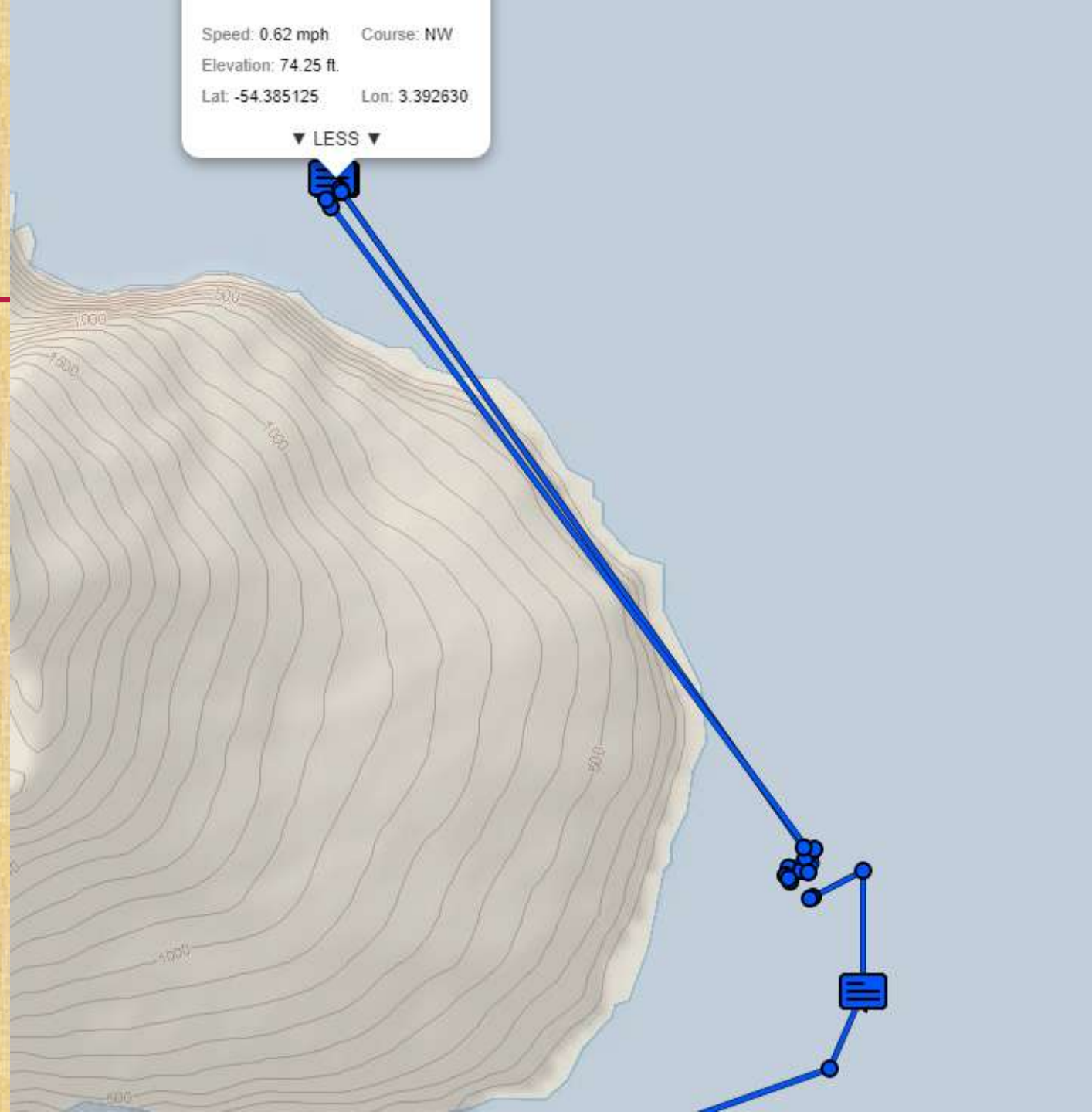




INTENSE STORM

FEBRUARY 2

WINDS HIT 80 MPH
NO PLACE TO HIDE.....



THEN AT..... 11:45 PM FEBRUARY 2ND

- While under power trying to hold position, the coupling on the starboard engine failed
- The passenger area filled with smoke, we donned our life vests and assembled on deck at the designated spot.
- We soon learned that there was no fire, but the rubber coupling had overheated, failed, and caused the smoke





COAST

BETANZOS



CBTZ

FEBRUARY 3 –WE AWOKE TO A BEAUTIFUL DAY!



BUT.....

-
- Concern if 2nd engine fails, may run aground/icebergs
 - If team on island, extraction impossible???
 - Captain declares:

MISSION ABORTED- unable to continue mission safely

Betanzos heads back to Chile....

Replacement Coupling installed on failed engine

Heads West toward home

Using two engines but very cautious

Due to headwinds and oncoming current, we crawl along for 2 days

Estimate 3-4 weeks to return to Punta Arenas

Then replacement coupling fails also !!!

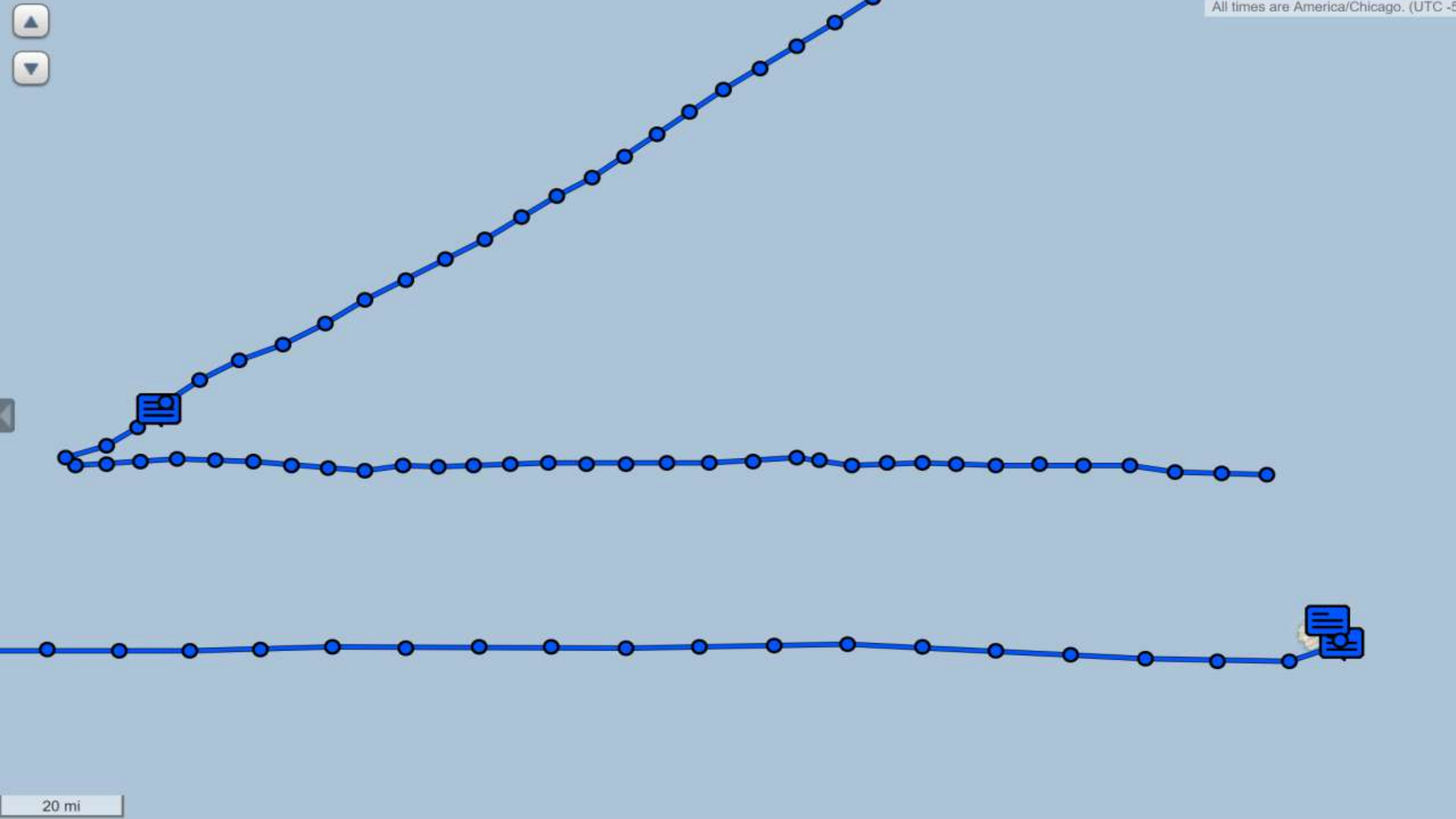
Now, one engine only.....out of options

Captain decides to head to Cape Town

Downwind & with current

Heads North to avoid ice fields





20 mi

Goodbye BOUVET...another time, maybe!



SO, HOW DID WE FEEL??? IT ALL DEPENDS.....
DIFFERENT PEOPLE VIEW THINGS DIFFERENTLY !?







NEARING CAPE TOWN FEBRUARY 16





CAPETOWN HARBOR AHEAD.... (14 DAYS SINCE LEAVING BOUVET)









SA2982





R.C.Y.C

Bouvet Island

DXpedition

Welcome to 3Y0Z

(Galley Restaurant)









3YØZ
BOUVET ISLAND

3YØZ
BOUVET ISLAND

3YØZ
BOUVET ISLAND

3YØZ
BOUVET ISLAND

3YØZ
BOUVET ISLAND

Due Diligence (vetting) process.....

- Chose same transportation contractor as Peter I...DAP
(they had just bought a NEW, OLD boat)
- On-site inspection in Punta Arenas, Chile ---April 25-30, 2017
(vessel was in dry-dock)
- Contract signed July 1, 2017....included “Fit for Purpose” questionnaire
- SKYPE call with DAP during our Atlanta Team meeting.
- Telephone or SKYPE calls at least every 3 weeks for updates on the vessel renovations (N4GRN, K4UEE and K0IR usually on calls)

Due Diligence performed.....continued

- Email communications often.....
- I20 Question “Fit for Purpose” questionnaire rcvd. from DAP...12/20/2017
- Teleconference with the Captain.
- Delays due to contractors, supplies and weather-----all explainable!
- All inspections, certifications and permits received prior to departure (albeit 6 days later than planned departure)

DXPEDITION VESSEL "FIT FOR PURPOSE" CHECKLIST	YES	NO	OK	COMMENT
Captain and number of crew who have sailed on this vessel?	x		x	total crew members 18 persons + pilots and helicopters mechanic 4 persons
Captain and crew members with Southern Ocean and ice experience?			x	7 years worked on operations ,on antarctic waters
Who is our English speaking liason? Does the captain speak English?			x	Captain an officers understand english ,intermediate nivel only
Ship's safety officer?	x		x	2 officer , shief mate and second officer
Has ship had trial run with crew before going deep into Southern Ocean?	x		x	this tipe of training is required before daparture and during navigation to antartctic crew have experiece on antartctic operations officers and crew ,including boatwains
Lifeboats port and starboard	x		x	no lifeboat, vessel have on board 6 liferaft totaly oparative
Lifeboats are covered		x		3 liferaft on port side and 3 liferaft on starboard side. Depending on timing, we might incorpore a lifeboat.
Emergency provisions are aboard lifeboats? For how many days?	x		x	Pack estándar OMI-SOLAS into liferaft.
Lifeboat engines have been run up and tested.	x		x	only motor overboard for rescue boat - (we have a second overboard motor)
Is there a heat source in the lifeboats?		x		
Adequate fuel is onboard in lifeboats.	x		x	extra fuell for rescue boat and secondary boats is available
Communication systems are aboard lifeboats.	x			bidirectional VHF equipment in according to SOLAS
Lifeboat launching system tested and crew is familiar with it.		x		no have lifeboat on board only liferaft
Are safety railings of adequate height and strength?	x		x	repairs an check by ASMAR drydocking punta arenas -chile.
Radar --State of the art with backup?	x		x	3 radar equipment totally operative X an S band
Redundancy of navigational systems?	x		x	duplicity on all equipment of bridge
Ship's call sign? Monitoring and hailing frequencies?	x		x	call sign- CBTZ MMSI 725000291 IMO 7310923 . Permanet listening on international frecuencys accordance ITU and IMO regulations, and Chilean Maritime Authorities.
Sections of ship that can be isolated by hatches in emergencies?	x		x	vessel have standard watertight door in diferent part on deck.

Ships draft?	x	x	5,30 meters of maximum draft.
Does the ship have sonar to access depth and anchorage sites?	x	x	vessel have a scientific echosounder SIMRAD and SONAR equipment FURUNO .
Ship's watch rotation? Hours on/off? Minimum number of crew on duty?	x	x	normal watch period, on ice areas reinforced watch during navigation. normal time 4 hour , on ice areas 4 hours 2 officer on bridge and lookout man
Life vests and emersion suits available for all passengers and crew.	x	x	immersion suit and life jacket for total numbers of crew and passengers , and life jacket for maneuvers for members of crew.
Emergency drill(s) will occur.	x	x	safety training and exercises mandatory during navigation
Muster station identified.	x	x	muster station signposted on upper deck - bowcastle
Man overboard and other emergency protocols reviewed.	x	x	vessel have protocols for emergency situations SOLAS - IMO
Is emergency reverse tracking available in this event?			
Fire aboard ship: Extinguishers? Other fire fighting equipment. Drills?	x	x	equipments estándar SOLAS
Ship's emergency medical supplies, medications, and facilities reviewed	x	x	Betanzos have first aid kit type A solas and special cabin for nursery
Basic medications, dressings, instruments, and hardware OK?	x	x	medicines and instruments accordance to SOLAS
Warming blankets and thermal regulation materials?	x	x	for crew and passengers and extra provisions
Are IV fluids stocked?		x	
Are there sterile packs for suturing, wound care, incision and drainage, etc	x	x	standard equipment solas international first aid type A (SOLAS -OMS)
Survey documents: Full survey completed and signed. Surveying agency	x	x	dossier signed and approved by Maritime Authorities
SOLAS certification and protocol followed (Safety Of Life At Sea)	x	x	dossier signed and approved by Maritime Authorities
Hull thickness report			
Propeller shaft inspection report. Crack tested?	x	x	check by ASMAR punta arenas - Chile Drydocking
Inspection log of all "through hull" fittings. Crack tested. Cleaned	x	x	check by ASMAR punta arenas - Chile Drydocking
Emergency pumps -- functioning, tested, adequate capacity.	x	x	check by ASMAR punta arenas - Chile Drydocking
Adequate tie downs, lines, and secured cargo facilities	x	x	
Is our cargo deck a dry deck?	x	x	
Will we have access to our container while sailing? (Weather & seas dependent)	x	x	
Anchor weight?			
How many anchors does the ship carry?	x	x	2 anchor maneuvers totally operatives and inspected by ASMAR drydocking
Length of chain for each anchor?	x	x	8 shackles port and 6 shackles starboard.
Condition of the brake bands on the anchor windlass.	x	x	inspected by ASMAR drydocking
Method of retrieving anchor if windlass fails, seizes, or the motor burns out	x	x	windlass have a manual system for heaving up anchor
What is the emergency alternative means of hauling the anchor?	x	x	manual system
Plan if anchorage system fails at Bouvet? Hoving?	x	x	
Adequate machine shop with turning lathe, vises, tools, torch, and adequate	x	x	complete set of parts
Engine spare parts? Cylinder sleeves, pistons, shafts, bearings, etc.	x	x	
Is the chief engineer able to troubleshoot and make engine repairs at sea?	x	x	
Is there a supply of rod, angle iron, re-bar, etc. available on the ship for im	x	x	vessel have a complete set of tools and parts or iron for various jobs.

Cruise speeds:			betanzos have two principal machines , caterpillar.
Max speed?	x	x	maximun speed 11 knots
Best efficiency?	x	x	speed on efficiency conditions 9 knots
Single engine?	x	x	5-6 knots approximately
Fuel capacity?	x	x	total fuell 580.0 cubic meters D.O.
Fuel to ->Bouvet ->Put to sea for 30 days in storm->bouvet->Return to port	x	x	Route to boubet 28 days + operations in área 30 days= 58 days maximun autonomy 95 Days on navigation (6000 lt. /day)
Ship's protocol and special precautions during helicopter operations.	x		
Does the helicopter operate off the cargo deck? Do we need to move cargo	x		
Wind indicators - flares - ashore?	x		
Maximum sling load weight?			
First flights -- Surface reference marker, basic survival materials, surface exploration party.			
Who communicates with the pilot from the ship? From the island? Language?			
Size of the "drop zone" must be reasonable.			
Can two helicopters operate simultaneously? OR, IS THIS ACTUALLY LESS EFFICIENT			
How many rigid inflatable boats does ship carry? (3+) Must be strong and j	x	x	1 rescue boat and 2 neumatic boat tipe ZODIAC for daily use on operations on boubet
Are there spare engines, spare parts and spare propellers?	x		
Are there ice axes, crampons, and repelling/climbing gear aboard ship for emergenc		x	
Are there experienced small boat operators in the crew? Surf, wind, swell	x		
Are there imersion suits available for the above type operations?	x		
Are there body bags available? Adequate freezer space?		x	
Do you have a list of ships operating in the area and their contact frequenc	x	x	
Do you have emergency tow arrangement if there is total loss of ship's pov	x	x	
Electrical voltages available aboard ship? 120 VAC?			
240VAC?		x	220 ac. ,and 380 volt and 24 volt cc.
Current frequency --- 50 to 60 cycle?		x	50 hrz
12 VDC available?	x	x	
What is the electrical outlet type(s)?	x		220 - 380 volt and 24 volt cc .

Do team members need to bring adapters?	x		
Is there temperature control and adequate ventilation in passenger cabins	x		
Where is the temperture of the cabins controlled? Local?	x		
Are there hand and bath towels provided aboard ship?	x		
Bed linens and blankets provided? How often changed?	x	x	
Is hand soap provided?	x	x	
Is hot water available for showers and wahsing?	x	x	
Is desalination unit of adequate size for number of crew and passengers?	x	x	
Are laundry facilities available aboard ship. Who does the laundry?	x	x	
Availability of coffee, snacks, soft drinks, 24/7?	x	x	
Team access to bridge?	x	x	
Can we install antennas for /MM operation? Cable runs?	x	x	
Are good (non-painted) surfaces available for grounding at the antenna an	x	x	
Space available for "shack"?	x	x	
Engine room --- Clean, noise protection available, engine backups, generat	x	x	
Bilge water visually inspected. No floating oil or fuel.	x	x	

Communications capabilities?

Weather Fax?

Hand help HTs for ship to shore comm.

Biographical sketches (CV) of:

Captain

First Mate

Chief Engineer



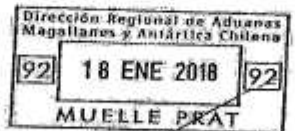
2 pilots

DECLARACION GENERAL

OSTO

Llegada

Salida

1.- Clase y Nombre del Buque BF " BETANZOS "		2.- Puerto Llegada / Salida PUNTA ARENAS	3.- Fecha y hr. llegada/salida 19 de ENERO del 2018
4.- Nacionalidad del buque Segun Bandera CHILENA	b) Sg./C/A.(a) C B T Z	5.- Nombre del Capitán GUSTAVO SEGUEL RAMBALDI	ZONA SUB ANTARTICA
7.- Puerto Matricula y Número VALPARAISO Nº 2 3 5 1		Agencias Marítimas Broom (P. Arenas) S.A. Jose Noguiera Nº 1367 - Telefono 2241571 Punta Arenas - Chile	
9.- Tonelaje reg.bruto - 1.438,07 -	10.- Tonelaje reg.Neto - 360,11 -		
11.- Sitio Atraque o Amare Sitio 2 Nte. Muelle Cap. Guillermo		 <i>[Signature]</i>	
12.- Breves detalles del viaje (B) PUNTA ARENAS - ZONA SUB ANTARTICA ATLANTICO SUR - PUNTA ARENAS			
13.- Breves descripción de la carga, con indicación de la peligrosa (c) PERTRECHOS VARIOS (25,0 TONS.)			
14.- Nº de trip. (Incl.Capitán) - 18 -	15.- Nº de Pasajeros - 26 -	16.- Observaciones del Capitán Al momento del zarpe toda la tripulación bajo mi mando se encuentra a bordo y sin novedad y dispositivo de posecionador satelital, activado.-	
Documentación adjuntas y Nº de ejemplares		 CAPITAN	
17.- Manifi. Carga NIL	18.- Manifi. Carga Peligrosa NIL		
19.- Ref. de Inpulación (d) SI	20.- Lista de Pasajeros SI	25.- Declaro que esta declaración y los documentos adjuntos son completos, exactos y verdaderos, según mi saber y entender.	
21.- Lis. de rancho / tienda NIL	22.- Decl. efectos trip.(e) NIL	26.- Fecha y firma del Capitán u otra persona autorizada, PUNTA ARENAS, 19 - de ENERO del 2018	
23.- Decl. manifi. sanidad (e) NIL	24.- Guia de correos (e) NIL	27.- OBSERVACIONES DE AUTORIDADES SIN CARGO ADUANERO	
			
28.- AUTORIZACION DE ZARPE			
29.- Autorización para zarpar con destino a : ZONA SUB ANTARTICA ATLANTICO SUR		30.- Fecha y sello del Capitán de puerto	

Authorization for departure

This document is required before departing port.

Betanzos was cleared to sail to:

ZONA SUB ANTARTICA
ATLANTICO SUR

LESSONS LEARNED:

- BOUVET is a very DANGEROUS place
- There is never good WX on Bouvet
- WX windows are short and infrequent
- The seas around Bouvet are wild! No shelter!
- Need to adopt Minimum Viable Configuration (MVC) like we perfected during NAVASSA-KIN
- Good team is essential (no sissies allowed)

NEXT TIME?.....MAYBE !

- 87% of Team says “yes” or “maybe” to another try
- Can we find another vessel?
- Can we find another Helo?
- Can we find NEW team members able to pay the big price
and have the time?
- Can we find the money?

NEXT TIME? DECISIONS TO BE MADE

- Can we downsize to allow for shorter, quicker WX openings?
- Can we get lucky on the WX...maybe go 4-6 weeks earlier
- Smaller footprint on island
 - One or two shelters?
 - Smaller team?
 - Fewer stations/antennas?

Is it worth the money, time, effort and risks?

NEXT TIME? DECISIONS TO BE MADE

- What about Dom 3Z9DX?
- What about timing for a second attempt?
- No attempt possible for at least 18 months
- Too long to hold contributors money for a 2nd attempt

Sooooo.....

WE WILL OFFER A **REFUND** OF THE BALANCE IN OUR
ACCOUNTS AFTER ALL EXPENSES HAVE BEEN PAID !!

- When? After the container has returned to USA
- After all equipment loaned to us is returned to our sponsors
- After ALL our bills have been paid
- How? There will be a “Request for Refund” form online
- You will have several options:

POSSIBLE REFUND OPTIONS AVAILABLE:

1. Yes, I want a refund via PayPal.....
2. I would like to direct my refund to the Bouvet Team to offset their considerable expenses
3. I would like to direct my refund to NCDXF, INDEXA or other DX Foundations
4. If you do nothing...your “unclaimed” refund will be directed to DX Foundations.

THANKS TO EVERYONE THAT SUPPORTED THE BOUVET DXPEDITION!

- Major Sponsors

- FlexRadio
- DX Engineering
- ACOM
- 4O3A
- NCDXF
- INDEXA
- GDXF
- ARRL/Colvin Award



THANKS TO EVERYONE THAT SUPPORTED THE BOUVET DXPEDITION!

Includes:

137 DX Clubs/Foundation

3700 Individual DXers



 **FlexRadio Systems®**
Software Defined Radios



DX 

ENGINEERING



MY PERSONAL OBSERVATIONS:

- Our contract called for up to 21 days at the island
- That would allow us 10-14 days “on the air”
- We only got 3 days at Bouvet,.....not 21 !
- If not for the abort, we would have gotten on the island and made QSOs
- It may have been a smaller operation than originally planned
- The engine failure was not the fault of DAP, but a contractor
- Last heard they were pursuing litigation against the contractor



73,
3YØZ

FlexRadio

WORDS TO LIVE BY

.....RICHARD BODE

For the truth is that I already know as much about my fate as I need to know. The day will come when I will die.

So the only matter of consequence before me is what I will do with my allotted time.

I can remain on shore, paralyzed with fear, or I can raise my sails and dip and soar in the breeze.

Many THANKS !



TX5T 2018
Raivavae, Austral Islands
August 15-22, 2018

Presentation by Bob Allphin, K4UEE

Where to go?

- American Samoa?
- Micronesia?
- Marshall Islands?
- Radio friendly hotel first
- Then, how to get there
- Australs, redux from 2017

Who went?

- W5MJ has organized several expeditions.
- W5RF, Bob Feldtman, has been on several of them.
- W5SJ, Bill Priakos of Ft. Smith, AR and Tampa, FL was new to the team.
- K4UEE, Bob Allphin, has led many high profile DXpeditions.
- K5PI was also new to the team.
- TR1SH took pictures and explored the island!

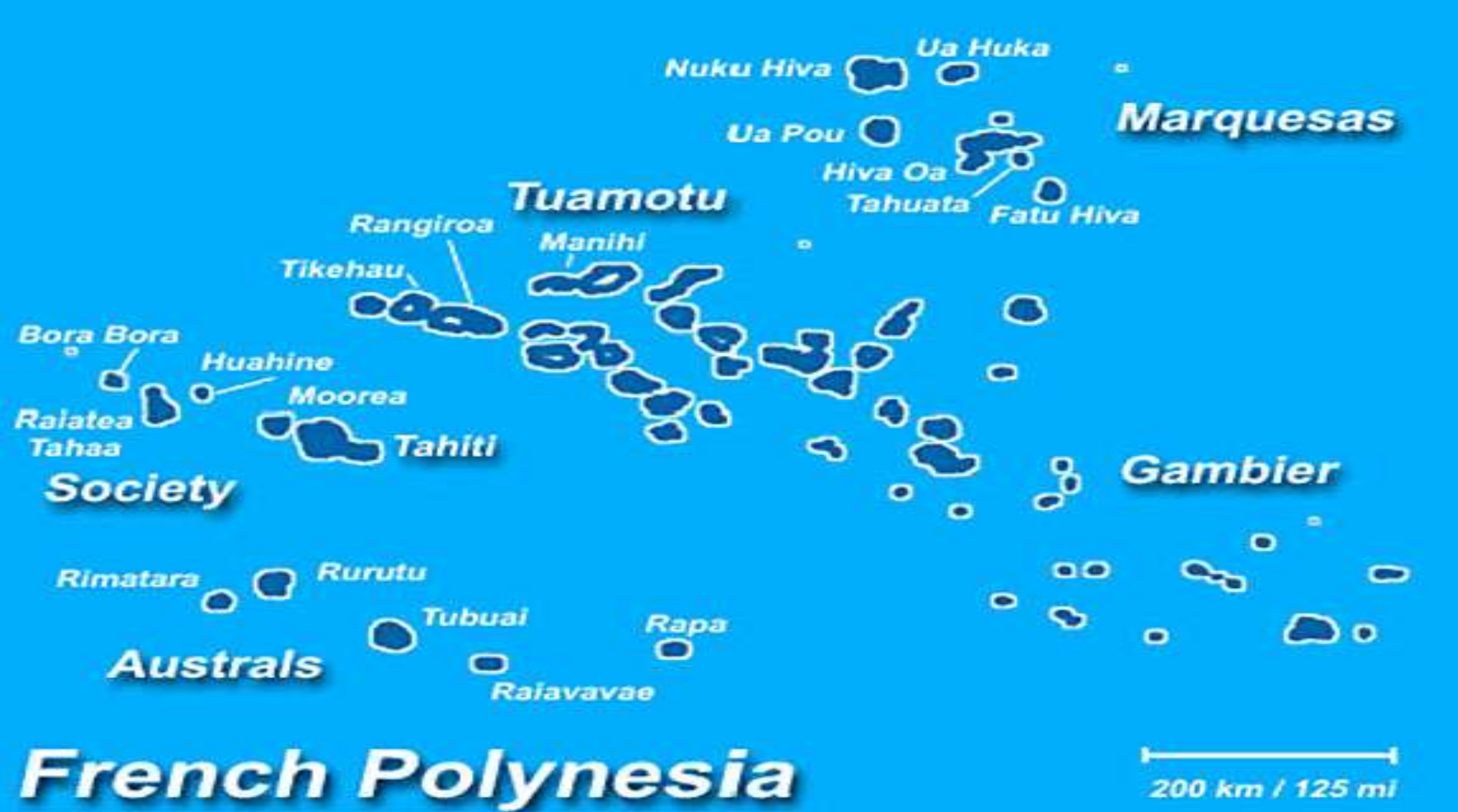


What to take?

- 248 radio items for three stations
 - 5 radios, 3 amps
 - 11 antennas
 - 1500 feet wire
 - 1000 feet coax
- Excel spreadsheet with Auto-Sort
- Shared by Google Drive

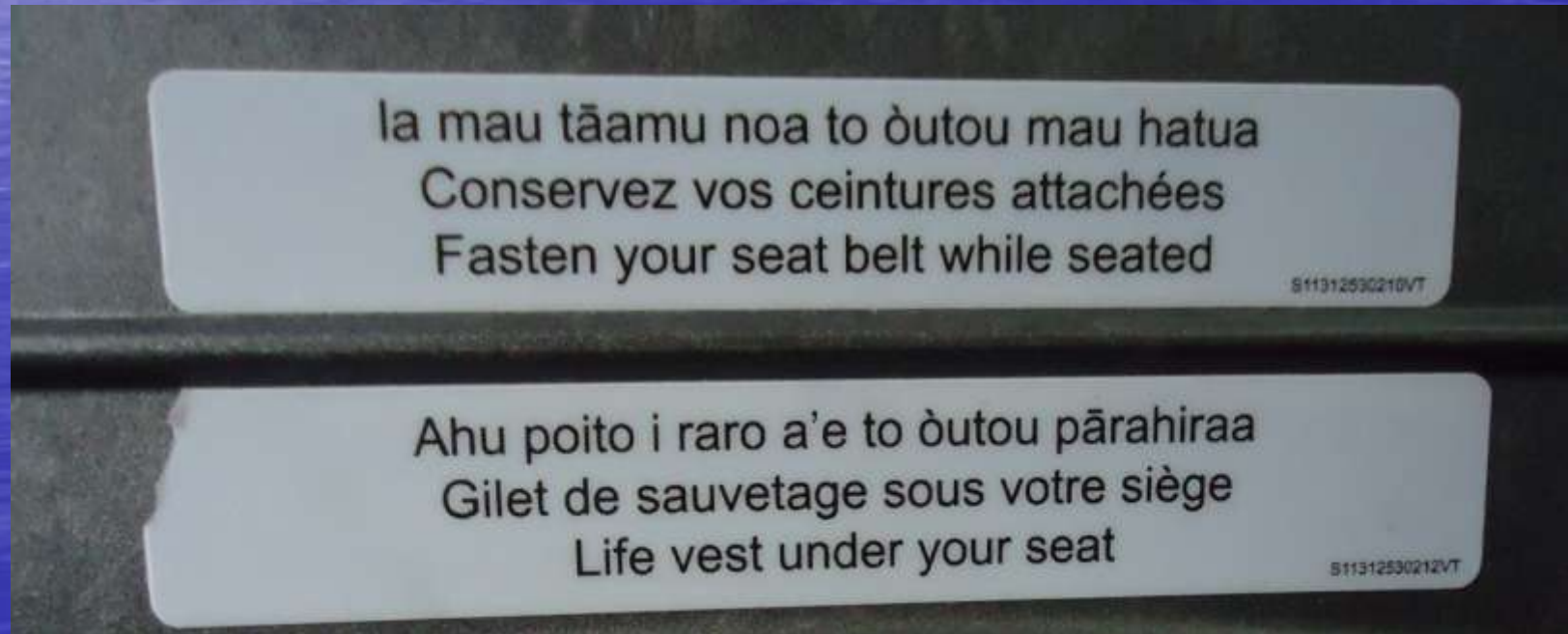
French Polynesia

- French possession
- 181 islands (67 inhabited) over a 1200 mile expanse
- 276K inhabitants, 69% on Tahiti
- Five island groups, three DXCC entities (French Polynesia FO, Marquesas FO/M, Australs FO/A)



Parlez-vous francais?

- French is the official language, spoken by almost all. Many speak some English.
- Seven native languages, with Tahitian spoken by 68K and heard regularly



Tourists

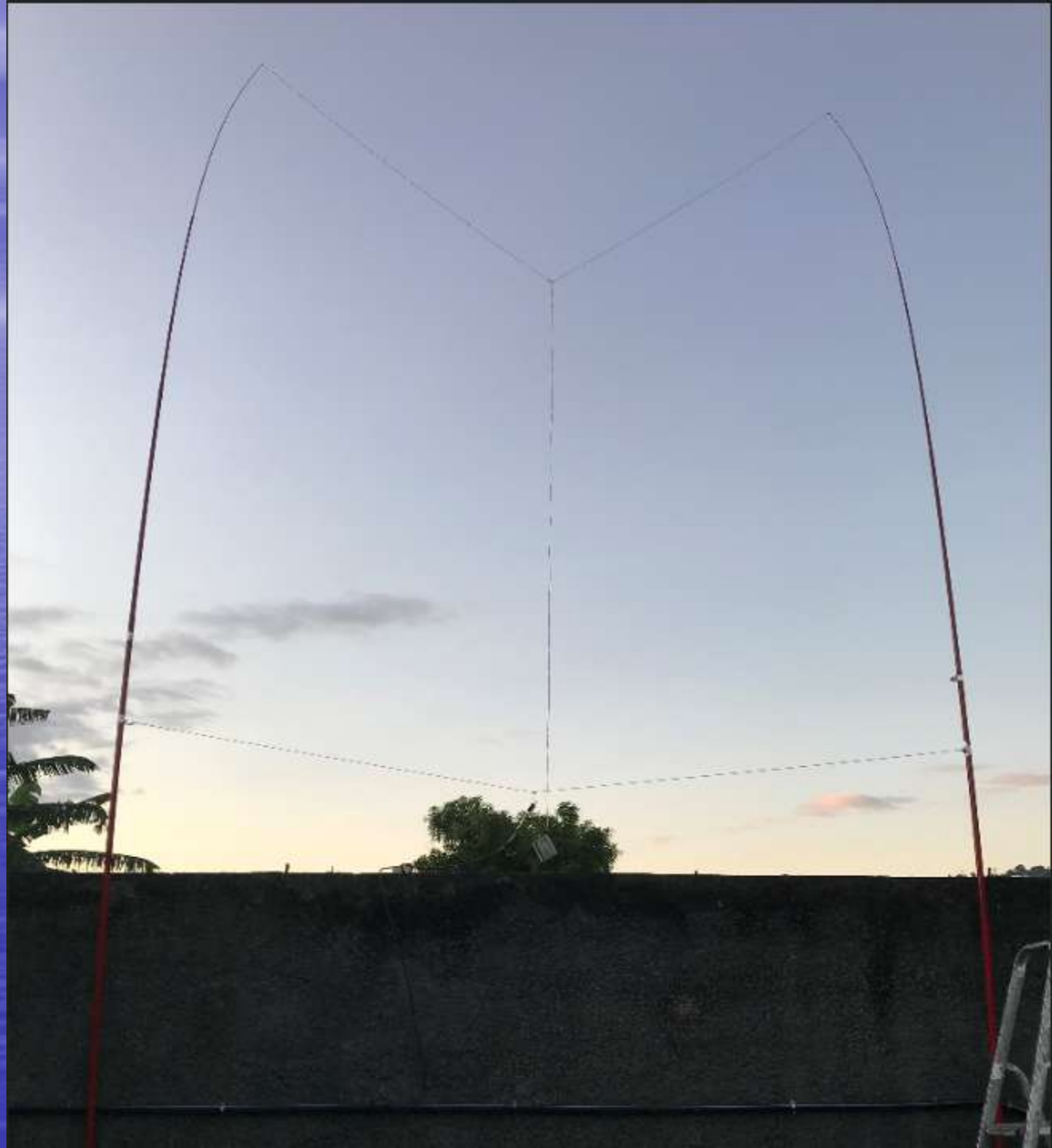
- FP is a popular tourist destination, with about 200K per year.
- By nationality: USA/Canada 39%, France 20%, other Europe 12%, Japan/China 9%, Australia/NZ 9%
- Many visit Bora Bora, Tahiti, or Moorea and interact only with a resort hotel

Getting there

- Halfway between California and Australia, about the same distance as to Brazil
- Same time zone as Hawaii (Texas -5, UTC -10)
- 3000 miles south of Hawaii
- 8 hours from LAX
- Air Tahiti Nui and Air France from LAX (some code shares)
- Frenchbee is a new discount airline with service from SFO
- United begins service in Fall 2018
- Inter-island ATR air service by Air Tahiti

Getting there

- K5PI came a week early to scuba dive on Tahiti – 800 QSOs as FO/K5PI
- Others came a day or two before the flight to Raivavae. We took a ferry to Moorea for a day.
- We kept our fingers crossed about cargo
- Our scheduled Monday flight landed on Tubuai – 160 miles from Raivavae but couldn't go on due to weather
- We were rescheduled for Wednesday. We took a driving tour of Tahiti on Tuesday.
- About 200 QSOs from the hotel as FO/W5SJ and FO/K4UEE (#87!)

















Raivavae

- “rah-EE-vah-vahee”
- 900 inhabitants
- 7 square miles, bike around in 2 hours
- Surrounded by an atoll
- MWF flights
- 1200 miles south of the equator
- Winter in August





Raivavae Tama Pension

- Three cabanas on the beach – 2 stations in one, 1 station in a second, K5PI and XYL in third cabana
- Three other cabanas across the road, near the dining room
- US\$100 per day per person, including all meals
- Yum! Lots of fish (including sashimi), all very nicely done
- Radio friendly – they've hosted a number of ops









STOP !

GAS
ini

Angkor



MAGASIN

VINI







Let's put up some antennas!

- Switchable Vertical Dipole Arrays (SVDA) for 10-20
 - Center fed, no radials
 - Optional second element works as reflector or director – we didn't use these
 - Very easy to put up
 - Placement on the beach is "magic"!







Ground planes for 30 and 40

- 12M Spiderpole fiberglass masts near the beach on the lawn
- Vertical wire taped to mast
- Two elevated radials
- Tune radials first with analyzer
- Trim vertical element for final resonance



CAUTION / CUIDADO

80 and 160 antennas

- 12M Spiderpole (80) on the beach Inv L with 2 elevated radials
- 18M Spiderpole (160) inverted L with 9-80 ft radials
 - A bit unwieldy, two sets of guys
 - One set of guys into the water
 - Clamps, not tape
 - 3 radials into the water
- Pennant RX antenna worked only OK (ground too good?)







Three stations, three bands each

- Each station had a daytime band, a day-night band, and a nighttime band
 - 10, 17, 40
 - 12, 20, 80
 - 15, 30, 160
- Radios and amps locked for 3 bands only
- One RS-232 linked PC, radio, and amp
- Manual swap of bandpass filters

Cables, cables, cables

- Three Elecraft KX3s – lent by Elecraft
 - Held up well in pileups
 - Macros to change modes
 - Lots of “dongles”, no RX antenna
 - K5PI: “I want more knobs!”
- Three Expert 1.3K-FA, 500W – 2 lent by W5UQ
- Three Lenovo laptops (T400, T430)
 - Good keyboards, including F-keys
 - GPS + NMEATime2
 - N1MM, networked
 - WSJT-X, emulates N1MM node
- Radiosport RS60CF headsets – lent by RS
- Powerwerx SS-30DV P/S – lent by Powerwerx

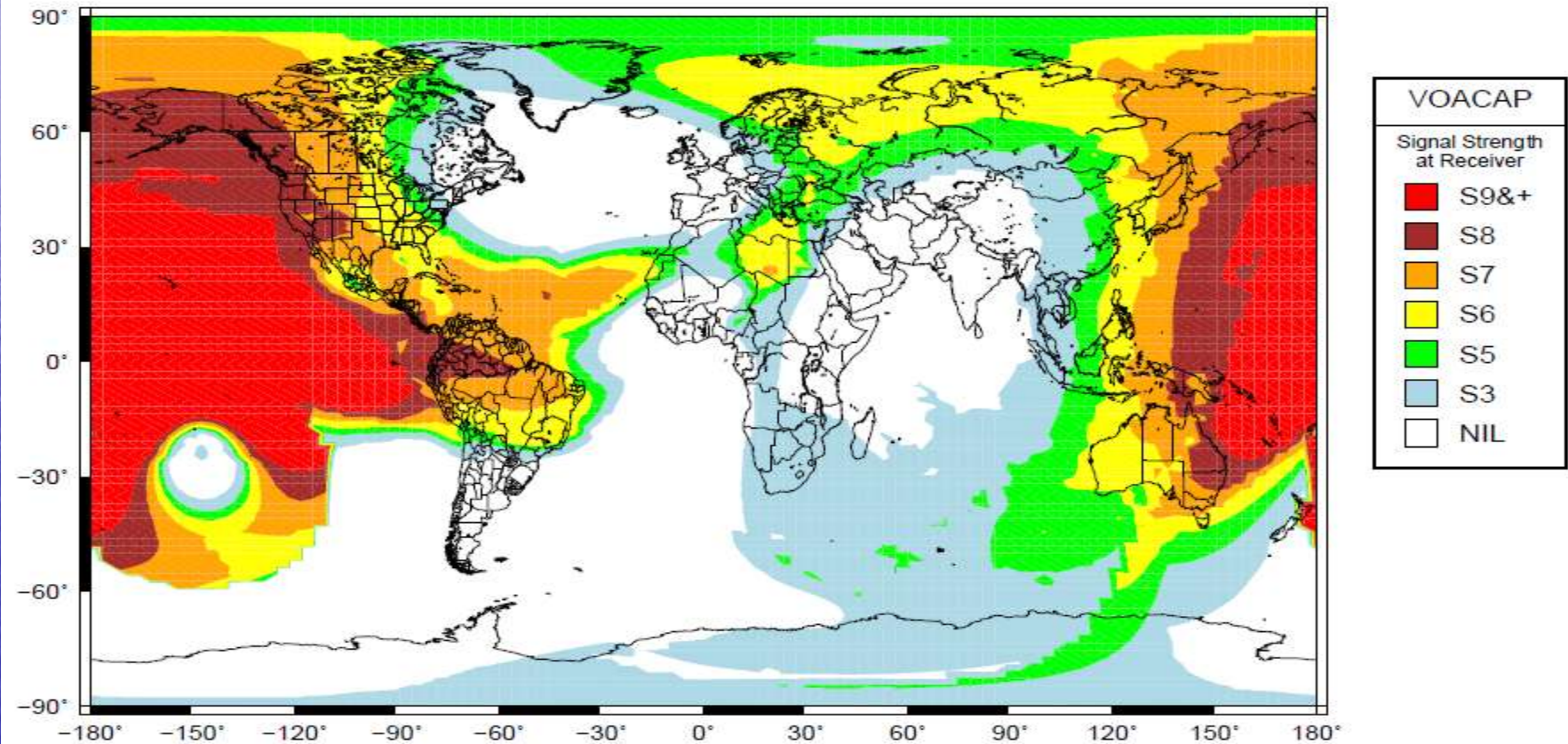




K6TU Propagation As a Service

20M: 06 utc Aug 14ssn

Prepared for: admin



Summed in The Magic Chart

UTC	LOCAL	10	12	15	17	20	30	40	80	160
0	2:00 PM	W4-5	W4-6	NA SA	NA SA,JA	NA, SA	W4,W8			
1	3:00 PM	W4-5	W4-6	NA SA,JA	NA SA,JA	NA, SA	NA	W4-5 SA		
2	4:00 PM	W5-6	W5-6 JA	NA SA,JA	NA, SA JA	NA, SA	NA,SA EU	NA,SA		
3	5:00 PM	JA	W6 JA	W5-7 JA	NA SA,JA	NA, SA	NA,SA EU	NA,SA		
4	6:00 PM	JA	W6 JA	W6 JA	W5-6 JA	NA, SA JA	NA,SA EU	NA,SA	NA,SA	NA,SA
5	7:00 PM	JA	JA	JA W6	W6-7 JA	NA, SA JA	NA,SA EU	NA,SA	NA,SA	NA,SA
6	8:00 PM	JA	JA	JA	JA W6-7	NA, SA JA	NA,SA EU,JA	NA,SA	NA,SA	NA,SA
7	9:00 PM	JA	JA	JA	JA UA	NA,SA	NA,SA EU,JA	NA,SA	NA,SA	NA,SA
8	10:00 PM		JA	JA	JA UA	JA	NA,SA JA,EU	NA,SA JA	NA,SA	NA,SA
9	11:00 PM		JA	JA	JA,UA EU	JA, UA EU,W6-7	NA,SA JA	NA,SA JA	NA,SA	NA,SA
10	12:00 AM			UA0	JA,UA EU	UA,JA EU,W6-7	JA NA	NA,SA NA,JA	NA,SA JA	NA,SA JA
11	1:00 AM			UA0	UA	UA,JA EU,W6-7	JA NA	NA,JA	NA,JA	NA,JA
12	2:00 AM				UA	UA,JA EU,W6-7	JA NA	NA,JA UA	JA,NA	JA,NA
13	3:00 AM				UA0	UA	JA UA	JA UA,NA	JA W6-7	JA W6-7

How were the bands?

- 10M – Very limited openings (172 x 8, 1%)
- 12M – Better than expected (373 x 13, 2%)
- 15M – Solid (2035 x 49, 12%)
- 17M – A workhorse (2577 x 49, 15%)
- 20M – Best, as expected (4983 x 72, 29%)
- 30M – Maybe done more? (1544 x 43, 8%)
- 40M – Sunrises WW (3886 x 76, 20%)
- 80M – US sunrise great (1581 x 34, 9%)
- 160M – Worked hard (568 x 17, 4%)

Modes, etc.

- CW – 12958 X 99, 73%
- SSB – 2001 X 42, 11%
- FT8 – 2760 X 48, 16%
- TOTAL 17719 x 104

70 hours in before we plugged in a mic 😊

First QSO: 8/16/2018 00:25:00 N6RW

Last QSO: 8/22/2018 08:18:00 JF7EGJ

QRV 6 days, 7 hours, 53 minutes

New DXCC for 1083, new band 3322, new mode 407

More stats on www.clublog.org

Continents

CONTINENT	QSOs	PERCENTAGE
Africa	65	0.4 %
Asia	4980	28.1 %
Europe	1433	8.1 %
North America	10766	60.8 %
Oceania	291	1.6 %
South America	184	1.0 %

Daily QSOs

DATE	TOTAL	UNIQUES	UNIQUE %
8/22	1903	1245	65.4 %
8/23	3183	1374	43.2 %
8/24	3360	1109	33.0 %
8/25	3153	1078	34.2 %
8/26	2886	789	27.3 %
8/27	2386	684	28.7 %
8/28	848	279	32.9 %
TOTAL	17719	6558	37.0 %

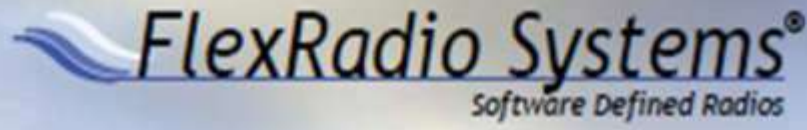
Special thanks for equipment

- Elecraft
- Expert Amps – W5UQ
- Radiosport Headsets – Arlan Communications
- Ham Radio Outlet
- Gigaparts
- DXEngineering
- Spiderbeam
- Palomar Engineers
- Pro Audio Engineering
- Array Solutions
- K6TU Propagation as a Service
- VisualGPS – NMEATime2
- M0URX.com – QSLs

Special thanks for contributions

- CTDXCC
- Texas DX Society
- Lone Star DX Association
- Numerous individual contributors – thank you!
- N7BT, K2SG – pilot stations
- W5JAW, WK5S for the mini FO antenna
- K5NA, N0JK for propagation advice

EXTRA SLIDES



3YØZ

Bouvet Island
54°S 3°E



The Most Remote Place on Earth

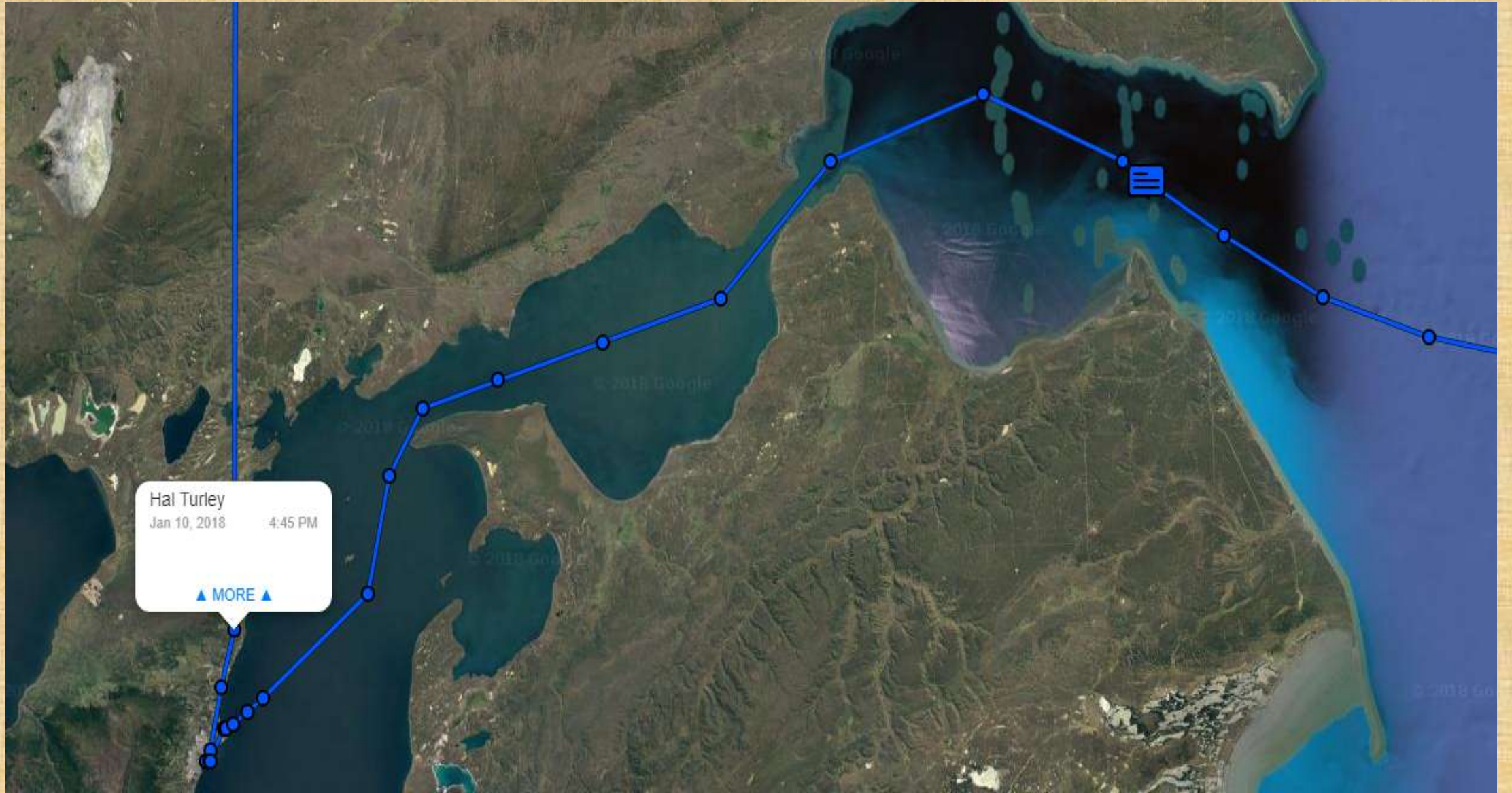
January 2018

www.bouvetdx.org



www.bouvetdx.org

ARRIVAL.....JANUARY 10, 2018





Rank	Prefix	Entity Name
1.	P5	DPRK (NORTH KOREA)
2.	3Y/B	BOUVET ISLAND
3.	FT5/W	CROZET ISLAND
4.	KH1	BAKER HOWLAND ISLANDS
5.	BS7H	SCARBOROUGH REEF
6.	CE0X	SAN FELIX ISLANDS
7.	BV9P	PRATAS ISLAND
8.	KH3	JOHNSTON ISLAND
9.	VK0M	MACQUARIE ISLAND
10.	FT5/X	KERGUELEN ISLAND









VZOS

EXAMCO





South Atlantic Ocean



RECENT EARTHQUAKES







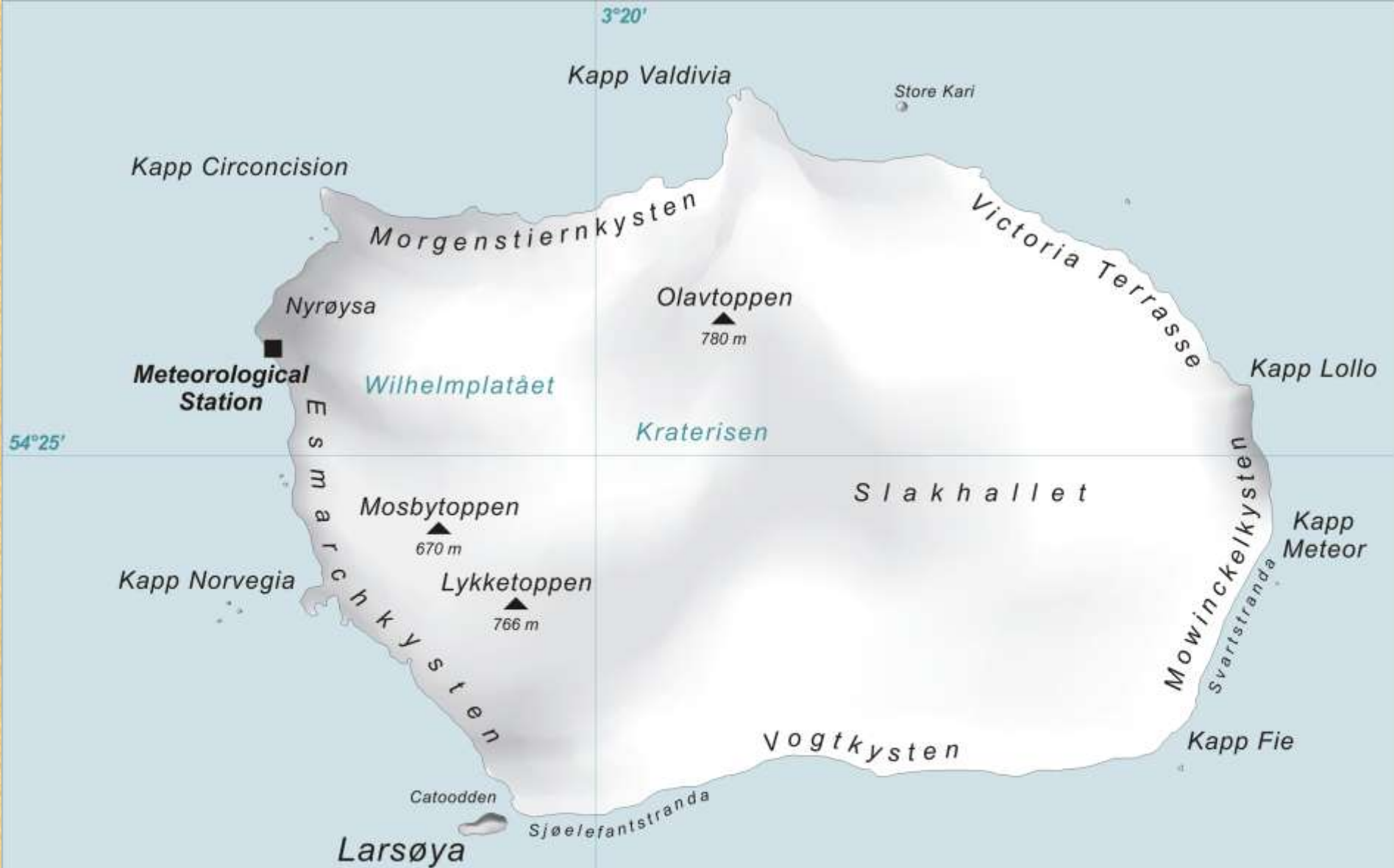
Vie. 2018-01-26 12:00 UTC-3
Datos: NOAA-GFS
Viento (10 m)
Isobaras MSL (hPa)
Flechas del viento (10 m)

Meteorológicos		
55.60°S	024.42°W	
145°	7 Ef	28.7 kts
Racha de viento 37.2 kts		
Corriente		
Presión (MSL) 974.8 hPa		
Temperatura		
Punto de rocío (2 m)		
Max		
Precipitación		
Nubosidad		
Humedad relativa (2 m)		
Isoterma 0°C		
Altura de la nieve		
CAPE	CIN	J/kg

C x	
kts	
75.0	
70.0	
66.0	
63.0	
60.0	
57.0	
54.0	
51.0	
48.0	
45.0	
42.0	
39.0	
36.0	
33.0	
30.0	
27.0	
24.0	
21.0	
18.0	
15.0	
12.0	
9.0	
6.0	
3.0	
0.0	



25h +131° 8s
prob):



54°25'

3°20'







CAN'T WAIT FOR BOUVET THEY SAID



WHO WANTS TO GO ON THE NEXT ATTEMPT?















WRAPPING UP!

- **DAP gave us a “fair & equitable” refund**
- **DAP paid for:**
 - **crew and safety training course**
 - **extra lodging in Punta Arenas, Cape Town**
 - **airfare home from Cape Town**
- **DAP will:**
 - **repack our 40 ft. container for shipment to ATL.**

























