

From pnapier@aac.nrao.edu Thu Jul 14 16:45:33 1994
 From: Peter Napier <pnapier@aac.nrao.edu>
 To: rbrown@aac.nrao.edu, pvandenb@aac.nrao.edu, fowen@aac.nrao.edu
 Subject: MMA sites around San Pedro de Atacama
 Date: Thu, 14 Jul 1994 14:46:10 -0600

This is a brief progress report on map searches for MMA sites accessible out of San Pedro de Atacama (SPdA).

I have now made one pass through all the topographic maps we have for areas accessible from SPdA. There seem to be three areas of interest that can be reached by roads that are shown on the maps to be good quality gravel roads (rather than the lowest quality dirt roads). All three areas appear to have one or more sites at about 14000 ft that are flat enough to take a 3 km array.

(A) The road due east out of SPdA. This has the closest and highest sites. Several locations in the range 14500 to 16000. The highest possibility is 16400 ft which is 32 mi from SPdA and has a 3% grade across it. The sites may be too high.

(B) The road south from SPdA through Toconao and Talabre. Plenty of sites around 14500 ft but a bit further (60-70 miles) from SPdA.

(C) The road north from SPdA to Machuca. There seems to be at least one site at 14000 ft - 23 miles from SPdA, 3% grade.

The very high sites possibly available in area A bring up the question "what is the highest we dare go?". The highest observatory I know of is MKO at 13800 ft. Do we dare go higher? How do we set a spec on our "highest allowable elevation"? I think it is principally a question of human physiology. Is it worth trying to research this question or shall we just set an arbitrary cutoff at, for example, 14000 ft, which we know is manageable based on MKO experience.

RNO: - Need to take tipper - run on car batteries
 10/22/94 ; or 10/21 → 1st Nov
 - laptop computer (2?)

(HST review 11/12)

• Email to Angel

Oct 22 - Nov 6 → Chile
 Sep 24 → Hawaii } RNO plans.

From angel@puppis.la.eso.org Tue Jul 19 14:21:15 1994
From: Angel Otarola <angel@puppis.la.eso.org>
To: rbrown@NRAO.EDU
Subject: Explorations in northern Chile
Date: Tue, 19 Jul 94 14:17:15 SAT

Dear Dr. Brown,

I am really happy to hear from you again.

Concerning to your questions, my schedule from beginning of October until end of November is as follow;

Time at the Observatory
October 07 --> October 14
October 21 --> October 28
November 04 --> November 11
November 18 --> November 25

The rest of the time I am normally at home in Antofagasta, and no vacations are planned before summer.

About the possibility to find a high altitude flat area, with the dimensions required in the east side of La Serena, I think that is close to zero. What happens is that if you go up to 3500 meters at the latitude of La Serena then you are in the middle of the Andes mountain. I've drive all the way up to Paso del Agua Negra (border with Argentina) and I did not see any flat area with the required dimensions.

If you want to keep close as possible to La Serena then maybe is a good idea to explore east of Copiapo, which is a city around 450 kms. north of La Serena. Our country at the latitude of Copiapo (South 27d) is 250 kms wide and, you can reach 4000 m. altitude when you are still 50 kms far from the Andes Mountains. Maybe is not a bad idea at all to spend some days in that area.

About my collaboration, if I can give you my opinion I prefer than Peter Napier and Frazer Owen come in January. Why?, because I am really interested to participate on the NRAO's project but November is the month we had planned our long maintenance, and at that time I have a lot of things to do. Please let me know what you think about it.

On other hand, if you really want me to participate I will really appreciate that we have a clear agreement since the very beginning to avoid problems and to keep a good friendship.

Well, for additional information do not hesitate to contact me again.

Yours Sincerely,

Angel Otarola/SEST

From fowen@aac.nrao.edu Tue Jul 19 18:42:07 1994
From: Frazer Owen <fowen@aac.nrao.edu>
To: rbrown@pantagruel.CV.NRAO.EDU
Cc: pnapier@aac.nrao.edu, fowen@aac.nrao.edu
Subject: Angel Otarola
Date: Tue, 19 Jul 1994 16:43:07 -0600

Bob,

I think the most important thing is that we have help from Angel at the beginning, especially in getting reliable vehicles, batteries for the tipper and anything else like that we don't bring with us. It also seems important to have him along at the beginning of our site visits. Once we understand the place we should be able to visit sites ourselves and collect tipper data, assuming we have one Spanish speaker with us. Thus it seems that we should do what is necessary to interface with Angel at the start.

Our plan right now is to leave for Chile on Oct 22nd. We would arrive on the 23rd in Santiago and it seems best to spend that day (Sunday) in Santiago. We could either go to Antofagasta on the 24th or we could try to talk to people in Santiago for one or two days before going north. Thus we could get to Antofagasta anytime between the 24th and 26th. We probably need a day there getting set up before we go to San Pedro working with Angel. Thus under this plan if Angel could get off from SEST a few days early to start work with us that would work well.

Alternatively, we could go to Chile a few days later and meet him at the beginning of his week off. This is quite possible unless we run into the meeting dates for the advisory committee. Have you decided when and where that meeting is going to be yet ?

It seems like we could play by ear how long Angel needed to stay with us in Antofagasta but it seems unlikely that we would need him more than one week, maybe only a few days assuming we have another Spanish speaker with us. If he met us on the 25th then he could still get some time off at home before his next shift.

All this assumes we have Juan or other Spanish speaker along.

I guess this implies you should contact Booth and discuss how practical these plans are before we go any further. Besides our schedule it seems important not to step on anyone's toes with demands for our schedule. It might be good to talk to Booth for that reason alone.

Is this a good plan ? What do you think from your experience there ?

---Frazer

Angel Otarola

Baculis - forwarded message.

Gerardo →

Bronfman Hotels / Cars /

A sun

~~W~~ ~~sun~~ ~~to~~ ~~San~~ Pedro

A Tues

@ 5557 est.

5557@cs.cmu.org. - Len

Yorkes (414) 555-5

10/19	wed	CV - NY (strip)	if AUC starts in afternoon
10/20	Thurs	NY - Miami	
10/21	Fri	Am. Santiago	→ Antofagasta (LA 52/92) overnight
10/22	SAT	overnight	San Pedro, day to high file check w/tour company
10/23	SUN	"	" " "
10/24	Mon	"	" " "
10/25	Tues	Go in van	Antofagasta
10/26	wed	Mon	to Santiago Antofagasta
10/27	Thurs.	Mon	to Santiago - Home Thursday evening.

- in Advance:
- Hotel Antofagasta
 - ~~eat~~ San Pedro
 - Rental car
 - Tourist van

- IR H₂O hygrometer

Phyllis / Jay

ftp> cd /home /daffy /dfrayee /ohd /proposal
 binary
 get 02_pwr2.ps
 get cover_02_pwr2.ps
 bye

Leo, Harris, Hugh PVB

LV. Santiago ⁰⁷³⁰ 24th

arrive Antio @ 0945

go to San Pedro

Tuesday 25th

go in van to high site return to Antio for dinner

Wed 26th

Ludico ~~to~~ to Santiago 0915-1135

PVB return to us that evening.

Bob to stay another day

Angel - IR Hygrometer. Give to Leo

21 LV. NY

22 Arrive Santiago → to Antiofegota

~~Catama~~

Saturday → c.

Tues 25th VAN

whin's board meeting?

Phyllis - Gerulda

Judy - Matrice + Seaman

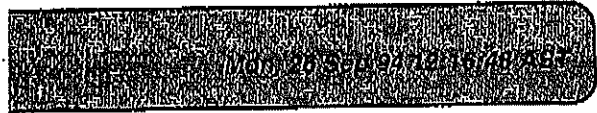
Emad

Thurs

Peter/PNO : 325 pm on 26th

Solwals 8331

Post-It™ brand fax transmittal memo 7671		# of pages ▶ /
To <i>R. Brown</i>	From <i>Leo</i>	
Co.	Co.	
Dept.	Phone #	
Fax #	Fax #	



Cc: leo@das.ucmle.ci (Leonardo Bronman)
 Subject: Re: Message from P. Vanden Bout
 Date: Mon, 26 Sep 94 12:16:48 AST

Dear Paul,
 The schedule is fine. I already made my Ladeco reservations. Please tell Bob to send the "dry run" schedule to make reservations for Geraldo Valladares, the person that I will send with him. Who takes care of lodging and car reservations?
 Best regards,
 Leo

To Antofagasta
 From Santiago

Friday	1445 - 1640	LA 52
	1500 - 1655	LA 92



 * P, 01 *
 * TRANSACTION REPORT *
 * SEP-27-94 TUE 10:40 *
 * DATE START SENDER RX TIME PAGES TYPE NOTE *
 * SEP-27 10:38 8042960385 1'09" 1 RECEIVE OK *

Bob Brown
 RECEIVED
 SEP 27 1994

12,500 → 3815
 13,200 - 4061
 14,760 4500
 16,400 . 5000

leo,

I am very glad to hear that Gerardo Valladares will be able to accompany me to San Pedro prior to the arrival of you, Paul and the NSF group. Below is ⁽¹⁾ what I propose to do and (2) arrangements that I hope you or Gerardo will be able to make for us.

(1) ~~As the way~~ ~~we~~ plan to arrive in Santiago on Friday October 21 and then take ~~the~~ ^{LA52} flight 52

~~that~~ ^{afternoon} to Antofagasta. It would be good if Gerardo could ~~not~~ come with me on that flight. I will make my reservations ^{on LA52} and Gerardo should make his. We ~~should~~ ^{will} stay overnight in

~~Antofagasta~~ ^{Antofagasta} on the 21st.

on Saturday October we drive to San Pedro de Atacama; ^{if possible} we will stay at the Hosteria in San Pedro

Saturday night, Sunday and Monday night. During the days Gerardo and I will ~~find~~ ^{locate} a site to show the NSF group. on Tuesday we meet you and the NSF group

and go by "tourist van" up to see the site. ~~the~~ ^{all} of us return to Antofagasta Tuesday night October 25.

I plan to stay Wednesday Oct 26 in Antofagasta to meet ~~the~~ Peter Napoli and the NRTO groups who arrive that day. Gerald could return with you and Paul to Santiago ~~there~~ on the 26th.

On Thursday, ^{Oct 27} I will take the morning flight from Antofagasta to Santiago and then return to the U.S. ~~the~~ evening of Oct 27. If time permits on the 27th I would like to come to the U. Chile Astromomy Department and give a talk or ~~work~~ ^{spend some time writing} with Ge. Karay.

(2) I would appreciate you or Gerald to help with the following:

- make reservations for Gerald and me to stay in Antofagasta the night of October 21 (Friday).
Some hotel not too expensive.

- I will make the reservation for the 4 wheel drive vehicle
~~Arrange to rent a 4 wheel drive vehicle~~
vehicle in Antofagasta.

- make reservations for Gerald and me to stay at the hosteria in San Pedro the nights of October 22, 23, 24.

- Contact one of the tour companies in San Pedro and reserve a van and a driver to take ~~the~~ ^{the} group up to the site on Tuesday October 25.

- Reserve a hotel room for Geraldo and me in Antofagasta ^{with you} ~~October 26~~ and the NSF group October 25. I would also like to stay the night of October 26 to meet with the VTAO group.

(3) Other things:

- I will receive the 4 wheel drive vehicle for Geraldo and me to pick up in Antofagasta.
- I left an infrared water vapor meter with Angel at SAST. If you are now at SAST will you ask Angel or Lars Nyman for it and then bring it with you back to Santiago and give it to Geraldo. I would like to have it when Geraldo and I go to San Pedro. I'll send Angel a note too; let me know if this presents a problem.

Thanks very much for your help. I look forward to hearing from you.

angel@pupis.ks.eso.org

From pjackson@polaris.CV.NRAO.EDU Fri Sep 30 10:37:57 1994
From: pjackson@polaris.CV.NRAO.EDU (Phyllis Jackson)
To: sest@eso.org
Subject: Re: NSF/NRAO Trip to Chile
Date: Fri, 30 Sep 1994 10:37:49 -0400

In Bob Brown's absence from the office, I'm replying to your e-mail message of 28 September. This is my understanding of the arrangements that have been made and which are to be made by you.

The night of Sunday, 23 October, Vanden Bout, Van Horn, and Harris stay at the Hotel Carrera. They have reservations there.

On Monday, 24 October, the four of you travel from Santiago to Antofagasta (you make your own airline reservations).

>From Antofagasto to San Pedro on (the 24th), you have reserved a van for five plus the driver.

Please make reservations for the group at the Hosteria in San Pedro.

On Tuesday, 25 October to the potential MMA site, have lunch in San Pedro, and return to Antofagasta in time for dinner.

Please make lodging reservations in Antofagasta for Vanden Bout, Harris, and Van Horn. They will take a morning flight on Wednesday the 26th to Santiago, and then back to the U.S.

We appreciate very much everything you are doing for us in making these arrangements. Thank you.

Phyllis Jackson
Secretary

Re: NSF/NRAO Trip to Chile

R. Brown

Wed, 19 Oct	Lv Charlottesville	0650	USA 3967
	Ar Baltimore	0750	
	Lv Baltimore	0835	USA 3658
	Ar Islip	0955	
Thu, 20 Oct	Lv Lagueardia	1930	UA 997
Fri, 21 Oct	Ar Santiago	0845	
	Lv Santiago	1445	Lan-Chile 52
	Ar Antofagasta	1630	
Thu, 27 Oct	Lv Antofagasta	0955	Lan-Chile 97
	Ar Santiago	1135	
	Lv Santiago	2155	UA 996
Fri, 28 Oct	Ar Miami	0445	
	Lv Miami	0700	UA 529
	Ar Orlando	0753	
	Lv Orlando	0900	UA 1180
	Ar Dulles	1059	
	Lv Dulles	1200	UA 6172
	Ar Charlottesville	1240	

OVERALL ITINERARY

Friday, October 21

Bob Brown arrives UA 997 at 0845 Santiago from New York
Brown and Valladares Lan-Chile 52 1445-1630 Antofagasta from Santiago
Staying at Hotel Plaza Phone: 56-55-269046 Fax: 56-55-266803

Saturday, October 22

Brown and Valladares drive to San Pedro de Atacama
Car reserved by Bronfman
Staying at the Hosteria Phone: 56-55-268259 Fax: 56-55-268259

Sunday, October 23

Brown and Valladares visit potential sites near San Pedro

Vanden Bout arrives UA 997 at 0845 Santiago from New York
Van Horn and Harris arrive Nat. Air 136 at 0950 Santiago from La Serena
Staying at Hotel Carrera Phone: 56-2-6982011 Fax: 56-2 6721083

That evening Vanden Bout, Uson, Harris, and Van Horn will have dinner with H. Quintana (to be arranged).

Monday, October 24

Brown and Valladares continue to visit sites near San Pedro.

Vanden Bout, Bronfman, Harris, and Van Horn take
Ladeco 60 0750-0945 Antofagasta from Santiago
Drive to San Pedro with van and driver. Stay at Hosteria Phone: 56-55-268259 ;
Fax: 56-55-268259

Tuesday, October 25

Entire group visits potential MMA site and returns to Antofagasta.
Staying at Hotel Plaza. Phone: 56-55-269046 ; Fax: 56-55-266803

Wednesday, October 26

Brown stays overnight at Hotel Plaza to meet Napier, Uson, Owen, and Radford, who are beginning site study trip.

Vanden Bout, Bronfman, Valladares, Harris, and Van Horn take

Ladeco 65 0945-1135 Santiago from Antofagasta

Colloquium that afternoon at the University of Chile by Vanden Bout --
"Recent Developments at NRAO"

Vanden Bout, Harris, and Van Horn take

UA 996 2120-0445 (+1) Miami from Santiago

Thursday, October 27

Brown takes Lan-Chile 97 ~~1135-2155~~ ⁰⁹⁵⁵⁻¹¹³⁵ Santiago from Antofagasta

Colloquium that afternoon at University of Chile by Brown --
"Molecular Gas at High Redshift"

Brown takes UA 996 2155 - 0445 (+1) Miami from Santiago