



April 15 - 25, 2016.

<http://www.lral.lv/exped/ep2a/>



Dear radio amateurs, with this summarized article I would like to thank you on behalf of EP2A for your support and officially conclude EP2A DXpedition.

Yuris /YL2GM/

THE BEGGINING OF EP2A

The idea about DXpedition to Iran was born in 2011 when I met with Natig 4J5T in Azerbaijan. He was fluent in Farsi Language and we thought it would help us organize and carry out the DXpedition. Situation changed when Natig got very ill and he had to go for treatment to United States of America. Sadly, Natig passed away in 2015 and never had the chance to see EP2A.



Yuris YL2GM and Natig 4J5T (Azerbaijan, 2011)



*Mohammad EP3MIR, Yuris YL2GM, Mohammad EP2LMA
(Iran, 2015)*

In 2015 we got outrun by EP6T. However, I didn't give up on this idea and later that year after correspondence with Mohammad EP2LMA and the cooperation with Latvian-Iran friendship association I visited Iran for the first time, where I met with Mohammad Mobini EP3MIR and Mohammad Azimi EP2LMA and we agreed on organizing common expedition.

THE PLANNING PROCESS

After analyzing EP6T slips we decided to look for a location outside highly populated and industrialized areas. Mohammad EP3MIR was responsible for acquiring necessary permits from CRA and government institutions. My responsibility was to complete the equipment and team.



Oleg US7UX, Dmitry UT7UJ, Sasha UT7UV, Yuris YL2GM, Valery YL3CW, Mohammad EP3MIR, Mohammad EP2LMA and Jack YL2KA.

Operating licenses in Iran are issued individually and to receive them we had to send individual applications with additional information. Not everything went as planned. After collecting all necessary information, the documents were sent to Iran via Latvian post office in one package, but the package was lost during the postage and it took a month or so for us to find this out. We had to collect the information again and that took some time as well. However, the documents were dispatched once more, this time using different post service and it was delivered to the recipient safely. This was one of the reasons that DXpedition starting date got postponed by 8 months. However, the good news was that we all received licenses and on top of that we were granted our desired call sign – EP2A.

During the whole DXpedition our team was supported from home. From Latvia by Agris YL2VW, Ziedonis YL2GN and Kaspars. From USA Herbert K7GEX.

THE TEAM

The first difficulties I faced when I started to gather the team. I called my friends but everyone rejected for different reasons so I decided to post information on contest.ru forum, where I met with Alex UX0LL – radio amateur from Ukraine. He helped to find 3 other team members, that allowed to complete the Ukrainian part of the team. Later for personal reasons 2 members called off their participation and from that point

we were 8-man team that didn't change – 3 Latvians, 3 Ukrainians and 2 Iranians.

EQUIPMENT AND ANTENNAS

I contacted Andrey RA6LBS and he helped us to provide the expedition with six "Perfo Box - 1500" band pass filters and two antenna Four-square switch relay units. More detailed information about this equipment you can find on his website <http://lowbandsystems.com>

Regarding power amplifiers, I talked to Martti OH2BH and he consulted me that the best option is Expert amplifiers with antenna tuning. Then, after writing personal message to Gianfranco IOZY, his company SPE manufactured two Expert 1.3k-FA amplifiers especially designed for EP2A and we received them just one week before the expedition starting date. Third amplifier (homemade) was provided by Eugene EA5HPX.

As for transceivers we used two K3 (mine and YL2KL) and one TS-590 (UT7UJ).

Antenna construction and testing I accomplished together with Jack YL2KA in the field next to my home. Altogether we completed 7x antennas: (2x) 5band spiderbeams, (2x) four-square arrays (30m and 40m), (1x) 160/80m vertical and (2x) RX antennas from Hi-Z. For the 160/80m and 30m, 40m we used fiberglass poles from spiderbeam.



Perfo Box 1500 bandpass filters and Four-square relay switch units by RA6LBS (LBS)



Expert 1.3k-FA power amplifiers by IOZY (SPE)



Spiderbeam

More information on this equipment can be found on their websites:

<http://www.spiderbeam.com/>

<http://www.hizantennas.com/>

For equipment and antenna transportation to Iran we used ATAcarnet services. I would recommend using this service for transportation if possible because of low costs, reliability and easy way to deal with customs. However, I need to mention that this service is not available for all countries. More info on <http://www.atacarnet.com/what-carnet>



Vertical 160/80m

TRAVELING

Tickets for trip Riga – Kiev – Tehran were ordered in advance and we had no problems with this.

It was Saturday morning 3am when I finished packing my bags. After three-hour nap and a quick breakfast I was on the way to Riga airport where I met with Larry

and Jack. From Riga we flew to Kiev where we met our Ukrainian friends in person for the first time. In Tehran we landed after midnight where we were greeted by local radio amateur friends and expedition members EP3MIR and EP2LMA with this amazing poster. After couple of hours dealing with custom formalities we were on the 420km trip to Gilan province – DXpedition location.



Welcoming in Tehran airport

SETTING UP DX POSITIONS

Day1: After quick survey of surroundings we start to set up our 1st spiderbeam antenna in the yard and the first QSO is established on 15th of April at 15:09 local time. Later the same day we manage to set up 30m 4-SQ antenna and the second station is operational.

After couple of hours operating our plans are interfered by local neighbor who with the help of axe starts taking down our 30m 4-SQ antenna. Local amateurs negotiate and with the assistance of the police the problem gets solved.

Day2: Second spiderbeam and 40m 4-SQ antennas are completed by noon, when other neighbor arrives with complaints about electricity usage. After presenting papers and a friendly chat the problem is solved. Third position is operational.

Rest of the day goes for setting up GP 160/80m. We are having some problems with noise levels (59+10db) and its practically impossible to hear something. It turned out to be power supply unit fault and after changing 2 of them the noise levels went down.

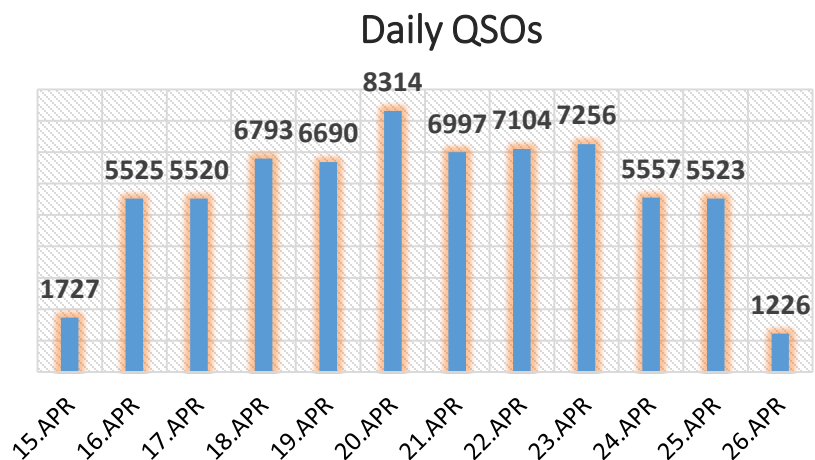
Day3: We finish setting up antennas. Computers are connected through wi-fi but he connection breaks down frequently which requires to restart network frequently. To solve this problem we had to use wires.

4SQ on 40m and 30m with the relay switch unit from RA6LBS were perfect combination. 160/80m transmitting antenna is also RA6LBS design. Both Spiderbeams are set up in the yard next to the house very close to each other, we could not set them further because of limited space, which caused some minor interference between them but other than that they worked good.

RESULTS AND STATISTICS

Result wise we had 2 goals for EP2A and we reached both of them. These goals were:

- 1) to beat EP6T QSO score;
- 2) to make more QSOs with NA.



Band/Mode breakdown

Band	PH	CW	RTTY	Total	Total %
160	2	1765	0	1767	2.6%
80	42	2007	0	2049	3.0%
40	2522	5593	310	8425	12.3%
30	0	9209	2527	11736	17.2%
20	8207	10694	796	19697	28.9%
17	4565	6833	334	11732	17.2%
15	4137	5796	527	10460	15.3%
12	223	1116	0	1339	2.0%
10	148	879	0	1027	1.5%
Totals	19846	43892	4494	68232	

DXCC by Band/Mode breakdown

Column1	PH	CW	RTTY	Total
160	1	66	0	66
80	17	73	0	73
40	80	105	42	111
30	0	112	77	115
20	109	114	59	125
17	90	103	28	109
15	97	105	49	119
12	25	66	0	69
10	24	53	0	58
Totals	127	133	84	151

Continent by Mode

Band	PH	CW	RTTY	Total	Total %
AF	126	144	12	282	0.4%
AN	0	1	0	1	0.0%
AS	2813	8203	1080	12096	17.7%
EU	14745	28531	2901	46177	67.7%
NA	1880	6452	445	8777	12.9%
OC	118	242	33	393	0.6%
SA	164	319	23	506	0.7%
Totals	19846	43892	4494	68232	

Continent by Band

Band	160	80	40	30	20	17	15	12	10	Total	Total %
AF	1	7	23	37	65	54	71	12	12	282	0.4%
AN	0	0	0	0	0	1	0	0	0	1	0.0%
AS	141	125	910	1810	2517	2997	2929	488	179	12096	17.7%
EU	1610	1782	6048	7372	13188	7480	7080	809	808	46177	67.7%
NA	9	122	1314	2379	3696	1105	152	0	0	8777	12.9%
OC	1	0	20	54	144	54	90	22	8	393	0.6%
SA	5	13	110	84	87	41	138	8	20	506	0.7%
Totals	1767	2049	8425	11736	19697	11732	10460	1339	1027	68232	

EXPERIENCE GAINED FROM DXPEDITION

1st lesson learned from this DXpedition is, that it is necessary to have more powerful computers. Moreover, it is mandatory to connect and test their network capability before the expedition in order to avoid networking problems like we had.

As well we are planning to switch log software from N1MM to Wintest or similar. N1MM takes much time to make call corrections and it doesn't support DXpedition recording feature.

Regarding transceivers for EP2A we used K3 and TS-590. For next DXpedition we will prefer K3 and we are planning to test new SDR IC-7300. As for power amplifiers we will use only Expert 1.3k because they proved as very good and reliable PA and in our opinion there aren't better alternatives.

EP2A QSL CARD



THANK YOU!

I want to thank all EP2A team for your devotion, involvement and participation in DXpedition. It was an honor to work with you together and I`m looking forward to work with you again on future DXpeditions.

Thanks to EP2A support team for help and support.

Thank you EP2A families for patience and moral support.

Thanks to all clubs, associations, cooperates and radio amateurs for financial support. Thank you for following our progress and being active on bands.

Thank you!

On the endnote I would like to share EP2A movie and remind you of EP2A website for more detailed information on DXpedition.

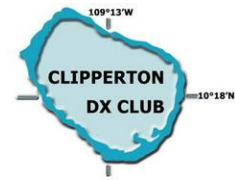
<https://www.youtube.com/watch?v=fsPrvtfi3xo>

<http://www.lral.lv/exped/ep2a/>

73, Yuris /YL2GM/

EP2A SUPPORTERS

Clubs and associations



Equipment and corporates



ES5TV

EA5HPX



Individual supporters 50\$+

YL2KL	N4LZ	K5JZ	YL3FT	KB5GT	W4DVG
JA3USA	YL2JR	K0VXU	ND0N	AI0O	W9EWZ
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*Full list of supporters published on EP2A website <http://www.lral.lv/exped/ep2a/>