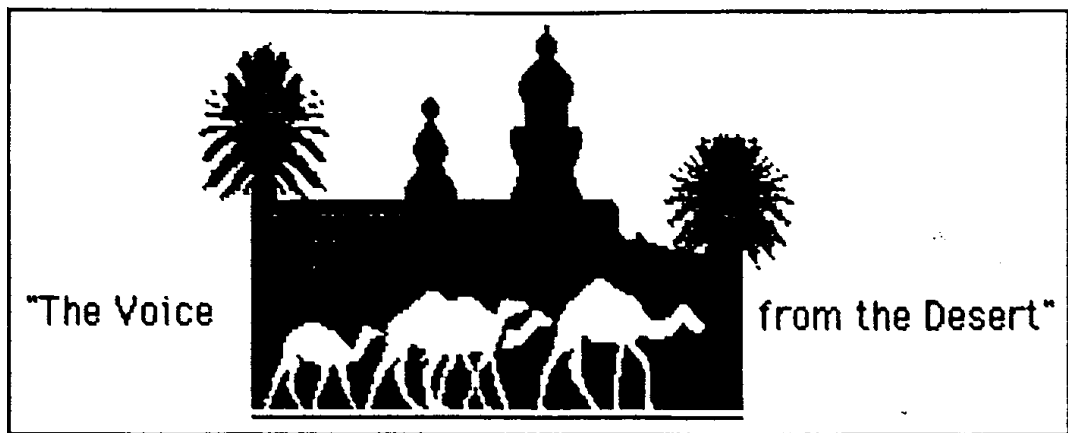


HZ1AB - The History Book

**Dhahran Amateur Radio Club
Saudi Arabia**

**By Thomas Carlsson
SM0CXU/AB5CQ/HZ1EX**



Prologue

The aim of this document is to collect information about the club while information still is available. At the start-up of this project, I have collected information from own sources, old documents from the club (stretching back to the mid 80's), the Internet and some old members that I have managed to encounter during my membership 1989 to the closure of the club 2004.

I have really tried to get things as correct as possible; suggestions, comments, corrections, additions, etc are still dropping in. I am sorry for those not mentioned etc., but I must end it somewhere, sometime.

Special Thanks

Special thanks go to:

- Dave Earnest, K7JJ (SK) ex W7KJJ for letting me take material from his nice HZ1AB web site qsl.net/hz1ab.
- Dr. Michael "Mike" Manafo, (SK) K3UOC (7Z500) who let me copy his article on Ham Radio in Saudi Arabia 1994 – 1998.
- Manfred Reichert, DF1IK/AB4FT/HZ1IK (SK) for scanning of QSLs and photos.
- Emre Socage, TA1I for helping me to put the HZ1AB – History Book on the WWW.
- Finally, and foremost, thanks to my wife Lauriid for her patience and understanding. Well, at times she has difficulties to understand our exciting hobby.

About Myself

Born in northern Sweden, small place by name Älvsbyn, near the cities Pietà and Luleå and some 100 miles (160 km) south of the Arctic Circle. 1960 at age of 16 I got my first license (C) which allowed for X-tal controlled TX on 7 MC only, next year I passed the A-License with full privileges but had to be on B-License level first for one year, 50W on 3.5, 7 and 21 on HF, max 50W. All this time I had the call SM2CXU. 1968 I moved to our capital Stockholm and changed to SM0CXU, working for Ericsson with implementation of transit and international crossbar switches. Started my foreign assignments 1969 in Brazil, no way to get a license and lots of work kept me away from ham-radio, after short stints in Kiev/Ukraine, Tashkent/Uzbekistan and Almata/Kazakstan, I was assigned to Hong Kong 1972 and was VS6CU, 1973-75 Malaysia 9M2CX, 1975-79 Kuwait 9K2EX, then Sweden 1980-84 from where I traveled a lot and managed some visiting operations at SM2CXU/DU1, BY1PK, S79WUW, etc. 1985-87 Ecuador HC2IA where I joined an expedition to Galapagos HC2IA/8. And finally, to Saudi Arabia 1988 and this you are about to read of.

During my time here in the Kingdom, as we say here (Kingdom of Saudi Arabia, KSA), I joined A45ZN 1996 for a CQWW-CW MS in Muscat, Oman, and A61AJ in WPX-CW MM 2004 where I did 15m together with Roger Western, G3SXW. Here I had to remind Roger how right he is in his book "Up Two - Adventures of a DXpeditioner", where he writes: "The process of running pile-ups is certainly addictive. Beware anyone who exposes himself to this adrenaline-rush - you will want more, and quickly!"

And now, finally, I got my own call HZ1EX, the license is dated 16 Ramadan 1425 Hijji, corresponding to 30 Oct. 2004 and active on the bands since January 2005 when I received my Station License.

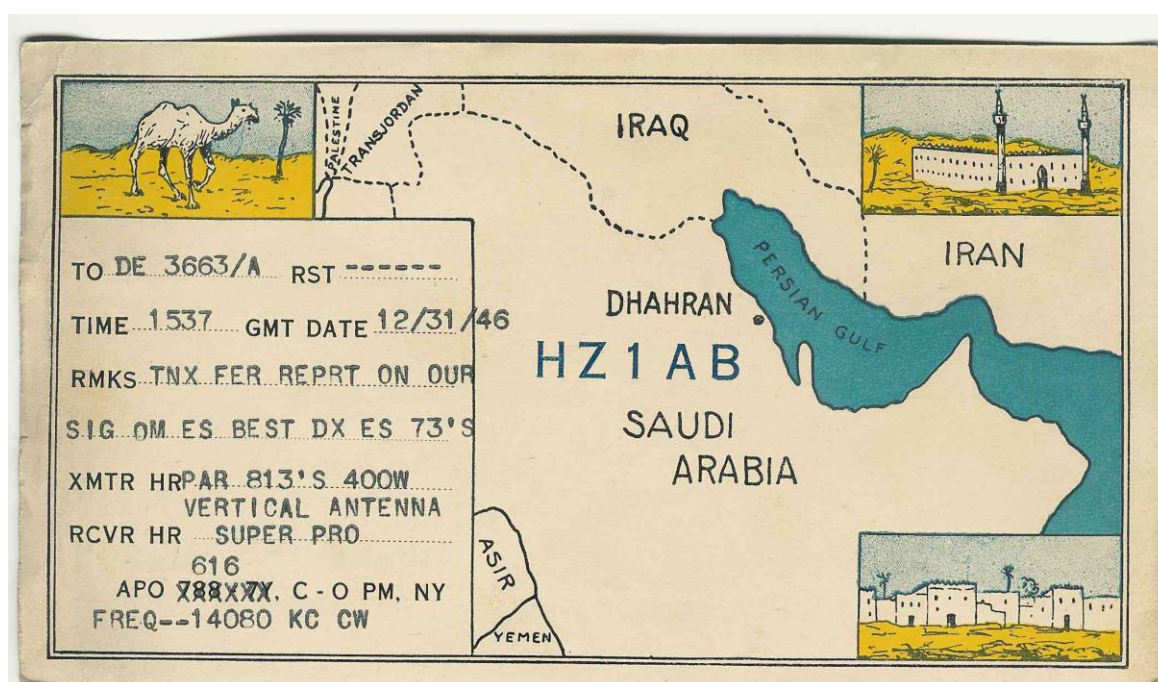
Using: FT 1000MP and a Cush Craft R7000 vertical (ex. 7Z500/K3UOC)

QSL Manager: SM0BYD.

To carry the tradition of HZ1AB, I am using the "Camel Picture" from our old QSL.

The History

The first known operation at HZ1AB is December 1946, this is verified by the QSL card pictured below.



HZ1AB QSL to a German SWL 31 Dec 1946. TX: 2 x 813, RX Hammarlund Super Pro, Vertical antenna.

In this early year's telephone networks were not what they are today, as late as mid 70's it was difficult to make an international telephone call, it had to be booked through operators and it could take hours to get the call and it was forbiddingly expensive. This did not apply to Saudi Arabia only, but to the whole region. Believe me, I know, as I was part in giving Kuwait their first international gateway with ISD (International Subscriber Dialing) in 1976, at the time I was 9K2EX. So HZ1AB for sure was much needed for communication, some of the later information will show so.

The Dhahran Amateur Radio Club has existed in name since 20 - 30 years and before that under other names, but there has always been an element of club attached to the call, one can say that it has never been a private call issued to any individual. The original license/permit was issued by Royal decree and lately it is the U S Military Training Mission (USMTM) that has maintained the license. Last years frequent shifts and reductions of the USMTM staff have obviously caused this important document to be difficult to locate, still trying. The Communication and IT Commission (CITC), the Saudi equivalent to the FCC in the USA, have passed the Amateur Radio Legislation so soon there will be more amateurs active from the Kingdom of Saudi Arabia.

Here will follow some collected material in chronological order:

1946 - 1948, General Information

This information is from Robert "Bob" Walsh, WA8MOA.

July 1949 QST, page 57 has a picture of W8FZL (then W8UMQ), W7KUC, W0LDK and W0TND with a HZ1AB sign. Station was TX Harvey Wells 160-10 and a Hall crafter BC-610, RX Hall crafter SX-28.

1946 - 1948, KE5TS ex W5HFM, Ken Riley

Here follows some mail exchange I had with Ken in May 2003, I also called Ken when I was at the Dayton Hamvention later the same month where he expressed his happiness to share old memories and talk to a present operator. It looks like Ken during this period (maybe it was longer than indicated above) was absent from Saudi while other operators filled in and operated, Ken traveled around the world to maintain radio communication equipment, what a dream-job it must have been in those days. I give you all of it; Ken may very well have been the first HZ1AB operator after all:

From: "Thomas Carlsson (TKS)"

To: <ke5ts@

Sent: Saturday, April 26, 2003, 3:01 AM

Subject: HZ1AB

Kenneth,

I saw your posting on our guestbook, the one you did back in January 2003, sorry but I do visit it too seldom.

As you understand, the expatriate community is getting smaller here in HZ, at present we do not have many active members and funny enough, most of the members are living in Riyadh. But we try to keep up the club and we have our meetings at the shack the first Friday each month. Friday being our "Sunday".

If you have any interesting to talk about your time at the club, feel free to share it with us, if any pictures or QSL, do not hesitate to scan and send them to me and I will share it with the members.

Incidentally, I am the only CW operator at present and since quite long ago. Meeting Fridays is mainly spent working pileups which we enjoy a lot.

73

Thomas Carlsson, SM0CXU @ HZ1AB

Secretary, Dhahran Amateur Radio Club

From: Ken Riley [mailto:ke5ts@]

Sent: 30 April 2003 03:02

To: Thomas Carlsson (TKS)

Subject: Re: HZ1AB

Hi Thomas

Thank you for your letter re: my posting to the HZ1AB guestbook in January 2003. I was pleased to get it

As you can imagine my very early days using HZ1AB (summer of 1948 as I remember) were filled with daily excitement. Many times, just firing up the station and saying "hello, HZ1AB, testing and listening" was all it took to start a series of contacts all over the world, or at least that is the way it sounded, like the whole world was calling me. Of course, conditions, for 10 meters and time dictated who I could hear. Usually fired up around 4 PM (local Saudi time) and Europe along with East Coast USA stations were solid across the band for the next 3 to 4 hours of operation. Heard very few stations West of the Mississippi While reading this keep in mind that in 1947-1948, we did not have SSB so there was no RX/TX on the same frequency. I would call on a xtal controlled freq on 10-meter phone

(only) using a Hallicrafters BC 610 xmtr at about 400/500 watts and received on an RCA AR-88 standard AM receiver. After each CQ call I would advise stations to start calling from the low end of the 10 mtr phone band (can't remember those frequencies) and sign their calls very often and would start listening and tuning up frequency for a very short time and write down the station calling and then at some point break in with my transmission and read off about 10 or 15 stations heard and then call off, in order, the stations and briefly exchange reports and general QSO info

I had a lot of problems with this arrangement because some stations would call and call and call with long gaps between ID and I couldn't wait that long because there were so many stations waiting. Some British stations were notorious for this, although there were certainly others

I can tell you about many funny things that happened while operating HZ1AB especially around the time that I was advising via ham radio that we were about to fold up the station and ship it back to the warehouse in Germany because our work in Dhahran was nearly finished. I was a Captain with AACCS at that time. Some stations advised that they had been calling every day for months without success and we just couldn't quit operating now etc. I believe I originated the call of HZ1AB although we were never given official authorization by any Saudi gov't representative to set up a station, I was afraid to ask because what

be done if they refused??? So, I thought I would try and if they said NO, I of course would have shut down, but I never got a NO. For that matter I never got a GO either. (Author's note: see information later how the official permit was given).

One last thing before I cut this part off. Heard HZ1AB on 20 Meters about 4 yrs ago from Oklahoma I called and called but no response and I thought boy isn't that a kick in the head because I thought it would sure be a novelty to work HZ1AB from my stateside QTH using my KE5TS call. It never happened....

This is too long so for now very best 73's and if you should want any earlier HZ1AB just let me know because I have a lot of very fond memories

From: "Thomas Carlsson (TKS)"

To: "Ken Riley" <ke5ts@s>

Sent: Tuesday, April 30, 2003, 10:43 PM

Subject: RE: HZ1AB

Ken,

Many thanks for your very informative mail. I understand EXACTLY what you say, I started listening to hams when I grew up in northern Sweden some 10+ years after your HZ1AB adventures and got my license 1960 (SM2CXU), so I know. Your story certainly is valuable history for our club.

Did you by any means meet Ahmad Zaidan, HZ1HZ. He can very well have been at the Saudi East Coast around that time, as you may know, he is still active and strong in contests, mainly CW.

Do you have any additional information, more exact period of operation?

By chance any pictures?

73, Thomas, SM0CXU @ HZ1AB

Secretary, Dhahran Amateur Radio Club - HZ1AB

From: Ken Riley [mailto:ke5ts@]

Sent: 05 May 2003 01:34

To: Thomas Carlsson (TKS)

Subject: Re: HZ1AB with more old history

Hi agn Thomas

I am delighted that you and the club members can use any of this "history of old HZ1AB" This goes back about some 55 years and that's a lot of ham radio under the bridge. Maybe a few words about this OM will fit in here. I am now 81 yrs old and been a ham since 1938. My military occupation was the installation and maintenance of transmitter and receiver sites, control towers, comm centers radio ranges and navigation systems for the United

States Air Force around the world. Have been in about 110 countries and operated ham radio from many of them, (without specific authority in most cases). Many times, there was no one to ask if I could or could not operate. So, when in doubt, I operated and not always with the proper prefix. I did not know what the prefix was for China or Indonesia etc. From Germany we used a DL prefix because there were no German hams authorized on the air (1947/1948)

By the way, the AACCS I referred to in my last letter stands for "Army Airways Communication Service" or "Airways and Air Communication Service" depending on what year is involved

We installed some very high-powered transmitters (generally 3 to 30 KW) for long haul HF communications. That's part of what we were doing in Dhahran, and this Also included installation of the control tower, using VHF and UHF and multiple Air-Ground frequencies. We also installed many Rhombic antennas on 73 ft Blau/Knox towers. for the long-haul circuits to North Africa East Africa, and Europe. Probably some of the towers are still standing around Dhahran. We had to dynamite the ground (rock) for the tower bases. Under that sand is solid rock.

Back to HZ1AB. It used to just flabbergast me to have what I considered to be some of the rarest DX station in the world ask for a QSL card from HZ1AB. Places like CR9AG in Macao, AR8AB in Lebanon, AC4YN, and so many others I can't remember. Not many hams have had the unbelievable experience of operating from such a rare DX station as HZ1AB. Its something that will probably never happen again (especially if you are the ONLY one in the country). I never heard another ham station from anywhere in Saudi Arabia when I was there so your friend Ahmad Zaidan must not have been on the air at that time or I would have at least heard him sometime.

On one of my trips back to Germany, I had about 250 QSL cards printed using HZ1AB and they were gone in about two weeks. The cards were standard postal card size, and I believe a rather blue green in color. They were mailed from an APO (Army Post Office) #616 with that same return address. All contacts were 10 Meter phone (no CW). Very plain cards with no fancy pictures or caricatures. The station operator was me, Kenneth E. Riley.

(See copy of the QSL under 1949 – 1950, W7LR, Bob Leo – ed)

I thought I kept a few cards for souvenirs but there were so many hams just begging for a card, so I used them all up. I sure would like to have a copy of one of them now but have no idea how to get one at this late time. No cards were mailed after 1948. Could any of your members help me with this?

My present call is KE5TS but use mailing address of KE6TS (my son). We live in Roseville, CA now. My call in 1948 was W5HFM (Oklahoma) I am an Extra class now but rarely operate the station here. I love CW And can copy about 35 wpm (or at least I could hi) CW is easier for me to copy as opposed to audio. My ears don't respond to audio very well If this gets boring, please let me know and I will gladly QRT. Please feel free if you want to use this on your HZ1AB web page

I'll try to make the next page more interesting. For now, best 73"s, Ken

From: "Thomas Carlsson (TKS)" <Thomas.Carlsson@ericsson.se

To: "Ken Riley" <ke5ts@

Cc: <df1ik@shabakah.>; <tposey@nettally.>; <sm0cxu@

Sent: Sunday, May 04, 2003, 10:06 PM

Subject: RE: HZ1AB with more old history

Ken,

Thanks a million, I do not think I yet have come across any of your old cards but will ask around. Winds of old valuable history is felt when I read this and I assume the same with my colleagues, your tales have a very attentive and interested audience. When I read your mail at our last meeting 02 May our members were amazed. We are sorry that we did not hear you the time 4 years ago when you called us. It would be a great kick for us too to have a QSO with you. I am the only one operating CW so it may very well be me. However, California is a challenge, but never say never. I will - may be - be operating in the WPX CW

contest 24/25 May and, we are usually operating every 1st Friday of the month when we have our monthly meeting. You can see if we are on the air on the www DX Cluster <http://oh2aq.kolumbus.com/dxs/> we are usually posted there when and if we are on. Go to the frequency and if you can hear us, give me a short telephone call to my Cell phone + 966 5 542.... and we can for sure try. I will be at Dayton Hamvention 16-18 May (in 2 weeks), why don't you give me your phone number and preferred times to call you and I give you a buzz from there.

Incidentally, just now it is the third generation of Rhombics that we have now (fourth if you used one), maybe it was you that initiated our Rhombic history. Look at the pictures at the HZ1AB web page and you will see the erection of our second (generation) one.

73, Thomas, SM0CXU @ HZ1AB

PS

The other addressees are

DF1IK, Manfred: Present member and treasurer, keen SSB operator. K4RX Terry: now living in Florida very active CW and SSB op at HZ1AB until he left 1995/96

From: Ken Riley [mailto:ke5ts@]

Sent: 08 May 2003 03:21

To: Thomas Carlsson (TKS)

Subject: Re: HZ1AB with more old history

Hi agn Thomas

Your return mail is sure welcomed around here It must b a great bunch of club members you have. I am most concerned that my mail won't be boring. I am beginning to wind down so doubt I can come up with much more interesting stuff or thing s your members can relate to.

Before continuing let me throw something of a general nature in here. All of you fellows that have the unique privilege of being operators of HZ1AB be certain to keep pictures, mementos, names, dates, and places of your association with HZ1AB. Remember, it, or you won't be around forever.

American interest, and military operations may soon terminate. (According to news reports) There will be others who will be interested in your experiences and inputs as operators of a very rare and respected station. You will find yourself trying to remember things that could easily be forgotten, such as the joy and excitement of stations lucky enough to work you in Saudi Arabia. You will find that normal operations from your home station will be much different than what you are doing and hearing now and when you are no longer "king of the hill" as HZ1AB and listening to unbelievable pile ups calling HZ1AB. You will now be in the pile ups and trying to get some other rare station to respond to your call. I have been thru that, and it is exasperating beyond belief. Now you can say, "you have been there and done that" and you will still find a lot of younger hams that will be thinking "Who is HZ1AB and where is Saudi Arabia???" "What's the big deal?" "You will know the answer to that one, HI HI. Probably won't have the chance to work you at any location now because the station here is very small and I am very rarely on Air We live in Roseville, CA (Close to Sacramento) My phone here is (916) 782. so maybe we could say hello when you are in Dayton. I would like that. From Arabia, I never heard the first station from California, not even long path.

I believe I have some pictures of me and HZ1AB in Dhahran and in and around old Al Khobar but haven't located them yet. There probably will be many Americans in and around the oil operations at ARAMCO, but have no idea is there will be any ham activity. I believe it's only the military operations that will cease. How will these things effect you and the station? I'll close and get this online and watch for your next mail. 73's from, Ken

From: "Thomas Carlsson (TKS)

To: <ke5ts@>; <df1ik@>; <tposey@>; <sm0cxu

Sent: Sunday, May 11, 2003, 10:46 PM

Subject: FW: HZ1AB with more old history

Dear Ken,

Great that you pick your brain again. Be assured that your mails never will get boring. Although HZ is much more common today than it was in your time, it is still a privilege and thrill to operate from here. It is still very close to impossible to be licensed here but for members of the Royal family so HZ1AB is an oasis for us. Unfortunately, the real operating enthusiasts (DF1IK, Manfred on SSB and myself on CW) lives in Riyadh and Dhahran is 400 km away for us so this makes our monthly meetings, 1st Friday/month, the only opportunity to operate - and we have a lot of pileups, approx. 600 contacts in some 7 hours. Yes, we agree on your history aspects. It has been plans to do a history write-up and your inputs really do accelerate these plans....

At least we will put together some scattered info but preferably do some that makes easy reading also for the masses. Not now though, due to work and with Dayton looming only some days away. In any case, Ken, you will be kept informed and get any copies of what we do. For your information, you are not the first HZ1AB operator, we have QSL copies of a contact that was made Dec 1946, this is said to have been a commercial airline pilot. Again, don't worry, that does not make your tales less valuable.

We continue to keep in touch and will give you a buzz on the landline from Dayton.
73, Thomas, SM0CXU @ HZ1AB

From: Ken Riley [ke5ts@]

Sent: 12 May 2003 23:32

To: Thomas Carlsson (TKS)

Subject: Re: HZ1AB with more old history+sum more

Dear Thomas

Great letter, thanks a million. Re: airline pilot with first HZ1AB call. Any chance he was with Pan American Airways? They were expanding their routes around that time. We had a Pan Am radio xmtr called a 12GLX, and I believe it was a beacon. It was installed at our radio transmitter site and none of our Air Force planes were using it.

Here is my first HZ1AB funny: We were installing some 600-ohm open wire transmission lines and had set a pole that was not too stable in the sand, so we looked around for some rocks to pack around the pole base. Found a small pile of rocks and dumped them in the hole. The next day here comes an Arab very upset that we had taken some rocks that were a part of his "mosque" or whatever. We found some more but he would not accept them as replacements. Seems he had to have the originals. SO, we had to dig up the originals under his watchful eye and give them back to him.

Here is my second Dhahran funny: We had installed several 3KW transmitters that were large. They were Wilcox 96C models. For maintenance the cabinets pulled out on rollers and when shoved back in place a blower motor came on and circulated air. One cabinet had a glass panel removed and hot air blew out the front. I told one of the Arabs standing around that Yahoodi turned the fan on and he really got upset and in Arabic said that "Yahooti was no good" and jokingly I told him "Yahoodi was OK". He moved a stick around about my face in a menacing way and reassured me that "Yahooti was bad" and sensed it was time to forget this before he swatted me with that stick. Later I got an interpreter who told me that Yahooti (sp) was an Arabic word for a race of people that Arabs do not like. My Arabic, is not too good, but this gave me a new word that I stopped using

Sure, would like to meet some of you guys. If you ever find yourself around Roseville, CA do something to rattle my cage hi. Your friend an old old ex HZ1AB

Ken (KE5TS)

From: Ken Riley [ke5ts@]

Sent: 15 May 2003 22:56

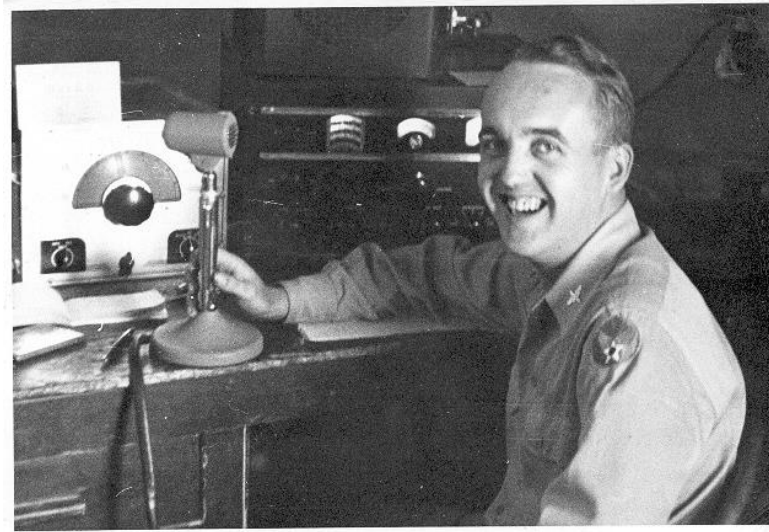
To: Thomas Carlsson (TKS)

Subject: Re: Old HZ1AB pix

Hi Thomas

I found a couple of pix from Dhahran. Both were taken in Jan of 1948. Not a good, detailed pix of the HZ1AB station. That's me at age 26. (I'm 81 now). We found that old wooden desk

someplace and I believe that equipment behind the mike was a VFO (very unreliable and would drift frequency during use) tied into the Hallicrafters BC 610 transmitter on the floor behind me. It was very heavy and took several men to lift it. The RCA AR88 receiver is over my right arm This was in a small room next to the screen in what was the theater at the time. No idea if it even exists now



HZ1AB with Ken Riley, KE5TS - 1948

Our operating time was limited to about a 3- or 4-hour window in the afternoon or early evening. We could not operate when the movie was on because of feedback into the movie sound system. Good thing there was no TV then because that BC 610 was a rock crusher, high on harmonics, and would have torn up every TV in the area. We had enough problems without that.

The other pix were over the entrance to the air terminal. Doubt if the building or anything else around there exists today the terminal was very active around 3AM because the military inbound and outbound flights took place at that time because it had cooled down enough to permit flights. I remember take off was low and long to give the aircraft time to lift. I don't remember any fighter aircraft there and certainly were no Jets.



The Dhahran Airport 1946

Sorry the pictures are not very detailed. I wish I would have taken more. All the best to you and the club members.

For now, 73's es CUL Ken



HZ1AB Mobile

Thanks, Ken, for sharing the pictures with us!

1947 - 1948, W6YEZ, John Leo

This was Bob's father; see text below.

1949 – 1950, W7LR, Bob Leo

In September 2004 I had some E-Mails from W7LR, "Bob", Robert E. Leo

Gm Thomas.

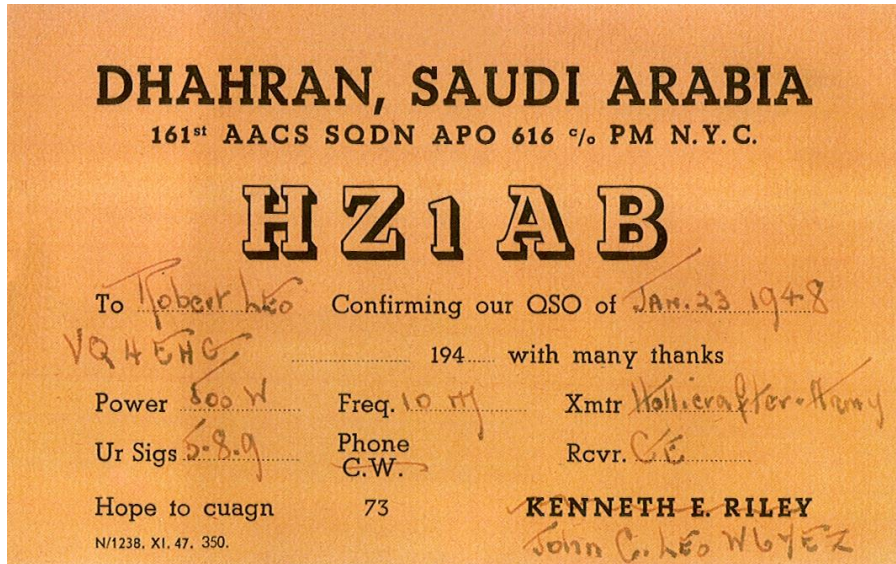
I worked for Aramco then and could go to the Dhahran airbase to operate HZ1AB. I recall it was in a Quonset hut (half-circle round roof).

My wife was in Holland at the time and couldn't go to Saudi Arabia (nor Bahrain Island), so we would qso via HZ1AB on 10m phone (probably AM in those days).

My father then worked for Aramco also, and we had a qso from HZ1AB to VQ4EHG where I was then operating from Kenya with the Hallicrafters Expedition. I have the QSL card from then - it says 161st AACS SQDN, APO 616 c/o PM NYC. Dated 23 Jan 1948).

The operator printed on the card was Kenneth E. Riley, but my dad scratched that out and wrote John C. Leo W6YEZ. It says 500 watts phone 10m. It looks like the rx was GE. I may have some photos somewhere (many boxes in the shop of old black and whites!). I don't have the exact dates when I was there - it was after I left the expedition in 1948, for a couple of years, and I believe to 1950 when we moved to CA. I'll see what else I can find or remember (not too good a memory). You can see a bit of my ham history on qrz.com and the expedition URL at the end of that.

73 Bob W7LR



This is the QSL mentioned in the text above, copy provided by Bob, W7LR.
 This card must be quite rare, first time seen by the author.

Notes:

So, the HZ1AB operator John C. Leo, Bob's father, used a card that "Ken", Kenneth E. Riley, KE5TS printed.

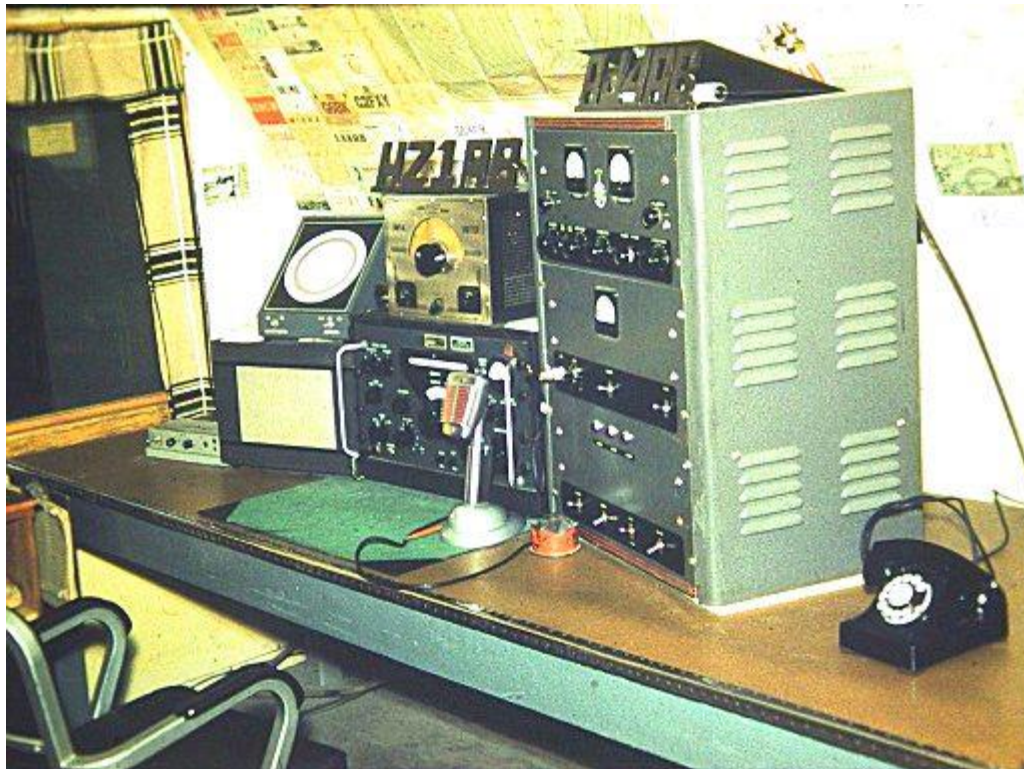
Go to, www.qrz.com/w7lr, for more information about Bob

The interesting story about Bob's participation in the GATTI - HALLICRAFTERS Expedition 1947 - 1948 to East Africa is found at, <http://www.qsl.net/pa0abm/ghe/00ghe.htm>

1950 – 1952, Off the Air

According to information from "Scottie" (see below), the station must have been quite inactive between himself and Bob Leo.

1952 – 1954, Richard "Scottie" Fisher, W8AM



"Scottie" sent the above photo. It shows the 1952-54 HZ1AB station in the Quonset hut a block up from the theater. The equipment shown is a Collins R-388/51J receiver, WRL Globe King; the VFO is a Meissner Signal Shifter. The antenna was a Gordon 20- and 10-meter Yagi interlaced on the same boom on a 60 ft (18m) pole. The rotor was also a Gordon, which was a continuous rotating type. The antenna was fed with kilowatt twin lead through slip rings built into the rotor housing.

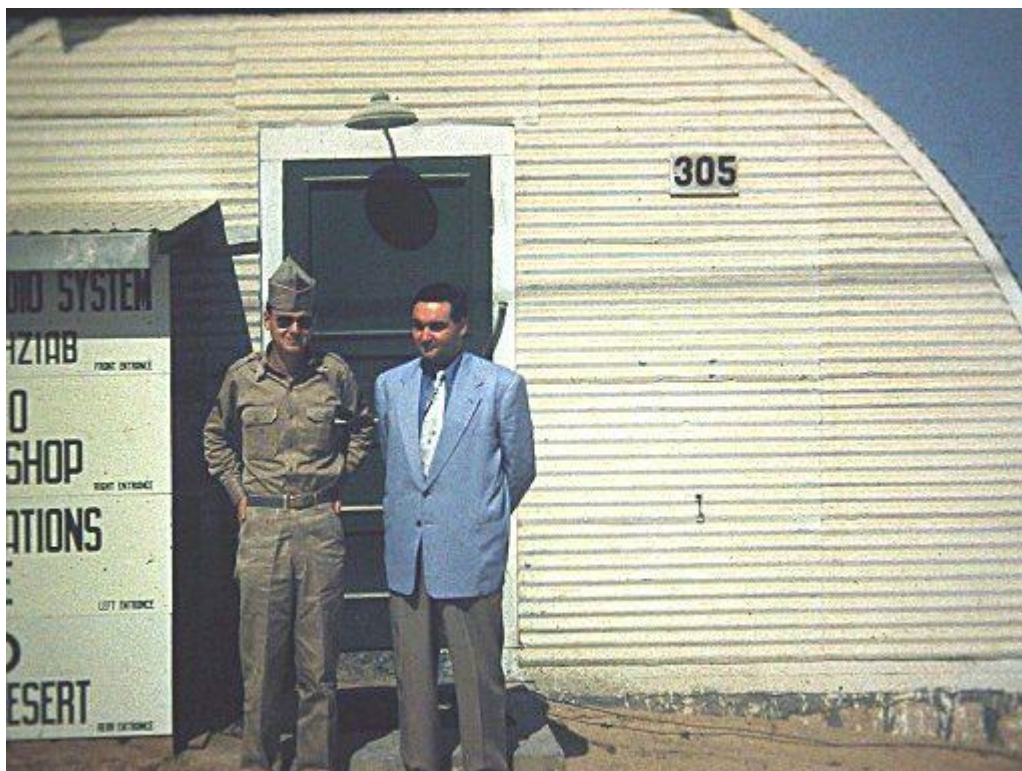


Scottie, W8AM. Chief Operator, HZ1AB. June 1953



HZ1AB QSL card, printed by ARAMCO print Shop, 1953

1953, HZ1AB QTH

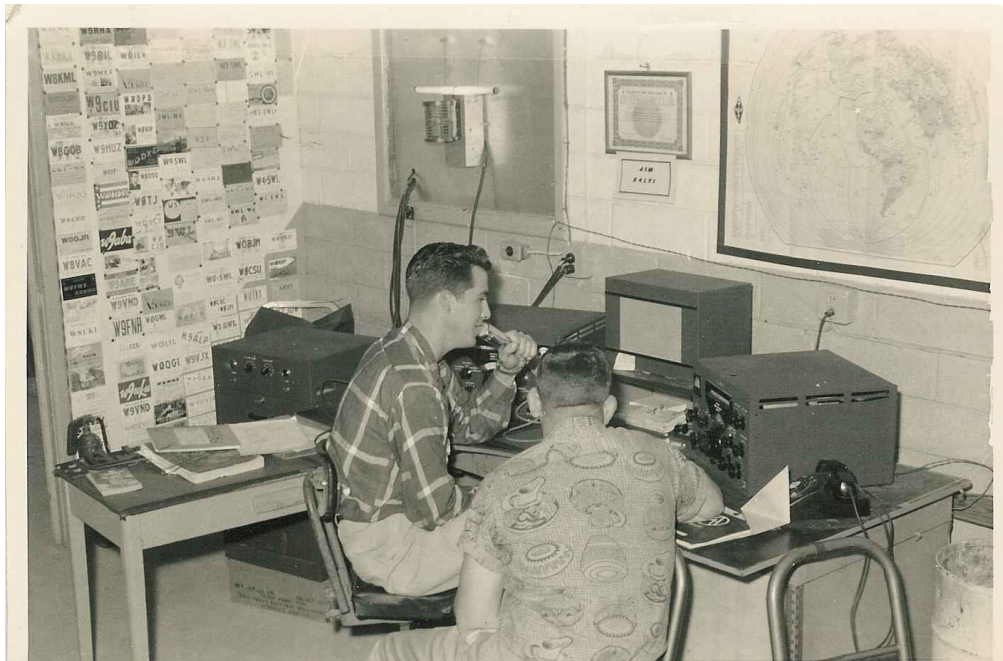


Bill Hawes, W9ERG, and Bill Wassom in front of AFRD, our AFRS station, and HZ1AB/AJ4AB Quonset hut. W9ERG was possibly the only draftee in Saudi Arabia and was with MAAG (later USMTM). Bill lives in Skokie, Illinois, and is radioactive from there. From K7JJ web

56 – 1957, Marc Rinks, W4WM ex K4LYG



Marc, W4WM then K4LYG operating HZ1AB late 1956 or early 57. The station was Collins 75A4 and KWS1, the antenna was a sloping V-Beam out near the end of the main runway.



And the BC-610 can be seen on the floor. Marc, W4WM left and visitor to the right

.1959 -, Recollections by Cliff Swann, W5SMI/7Z3AA

From K7JJ web

Cliff Swann had an illustrious career in Saudi Arabia from the late 50's until.....Here he shares some of his remembrances of operating amateur radio in Saudi Arabia. He, along with Vic Crawford, W1TYQ, received individual licenses from Saudi PTT

Hams in Switzerland reported we were melting the snow on the Alps when we went on the air with the MW-2. I often wonder what happened to that big, beautiful amplifier? (See pictures below). When I first visited HZ1AB in 1959, they were using an old BC-610 as an Amplifier. They disconnected the 807 driver and connected a Collins 32V2 to the plate caps thru a capacitor!!! The picture of Vic on expedition shows my old Land Rover, which I loaned him to make the trip to the Neutral zones (see QSLs that follows). Vic and I were founding members of the Dhahran Experimental Radio Association (DERA). I was the first President and Vic followed and then Jim Mandaville. We were required to form the association to meet the requirements of the Saudi license. Aramco government relations dept. negotiated the agreement, which made ARAMCO responsible for any wrong-doing and spelled out the terms of the license which included the license holders to monitor and report any infractions of the Saudi Communications Act. Vic & I made frequent trips to Riyadh on ARAMCO business, and we made it a point to visit with Ahmed Zaidan who was the Assistant Minister of Communication for the Ministry of The Interior. It was Ahmed who convinced King Faisal to approve the Saudi Communications act, which among other things permitted Experimental (HAM) Radio. It was a great day for DERA when that news was received, but ALAS! we never succeeded in getting additional licenses granted. ARAMCO provided the meeting room for the club and WA5OEG, Joe Hall fabricated the code practice tables and desks. Joe retired shortly afterwards and settled at Hot Springs, Ark., where he put up a Tri-Band Cubical Quad on the shores of Lake Hamilton. We were able to carry on many QSO's on schedule with Joe from Dhahran and ABQAIQ where I had been transferred as Foreman of Communication. When I retired from ARAMCO in 1970, Joe and I founded our own corporation in Texas- (Micron Industries Inc.) When Joe passed on a couple of years later, I

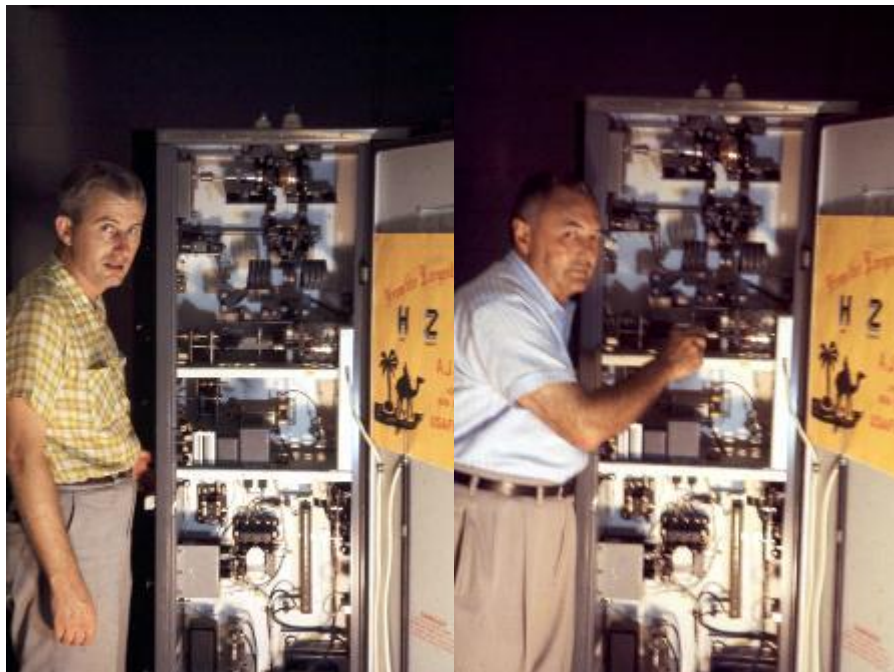
sold Micron Industries Intact, and they today are a thriving branch of Wheelabrator Corp. Henry Folkerts 7Z3AB also retired to Oregon and has since joined the many silent keys we have known. The Collins Radio Division of Rockwell Int. needed help in Iran, so my next effort was in Tehran as Senior Computer Engineer, until the Shah was deposed, and we (Americans) were advised by the State Department to leave Iran. Shortly thereafter Rockwell was awarded a contract for a communications consultant in Saudi Arabia, so it was back to Riyadh to work for the Ministry of The Interior. When Rockwell established a branch office in Riyadh (SABA) which stood for Saudi Arabia Business Area, I was promoted to Manager of Product Support and retired from that position in October of 1985. My traveling days are over now, and my home is on the shores of Copano Bay, at Holiday Beach, which is about 9 miles North of Rockport, Texas. There are many color slides in my collection of activities at HZ1AB, so I will dig some of them out and mail to you along with my 7Z3AA QSL Card. This is enough I think for this time Dave, but there is much more. Hope my server accepts these several bits and pieces and hope to hear from you soon,
Best 73s & Al-Hom-Di-Li-La Cliff Swann
From K7JJ web

1960's, HZ1AB Operators and Station Equipment

K7JJ web

Cliff Swann, W5SMI/7Z3AA. Vic Crawford, W1TYQ/HZ3TYQ. Shelby Barksdale, 7Z3AC

The following photos show the modified Westinghouse MW-1 transmitter that the guys used to "melt the snow off the Alps!" Cliff has written me a long letter that tells the story page which explains how beautiful this old amp was. They drove it with a Collins KWS-1. The receiver was a 75A-4. Unfortunately, we don't have any pictures of the operating position. Vic was a TWA pilot and later ARAMCO chief pilot.



Vic, HZ3TYQ

Shelby, 7Z3AC

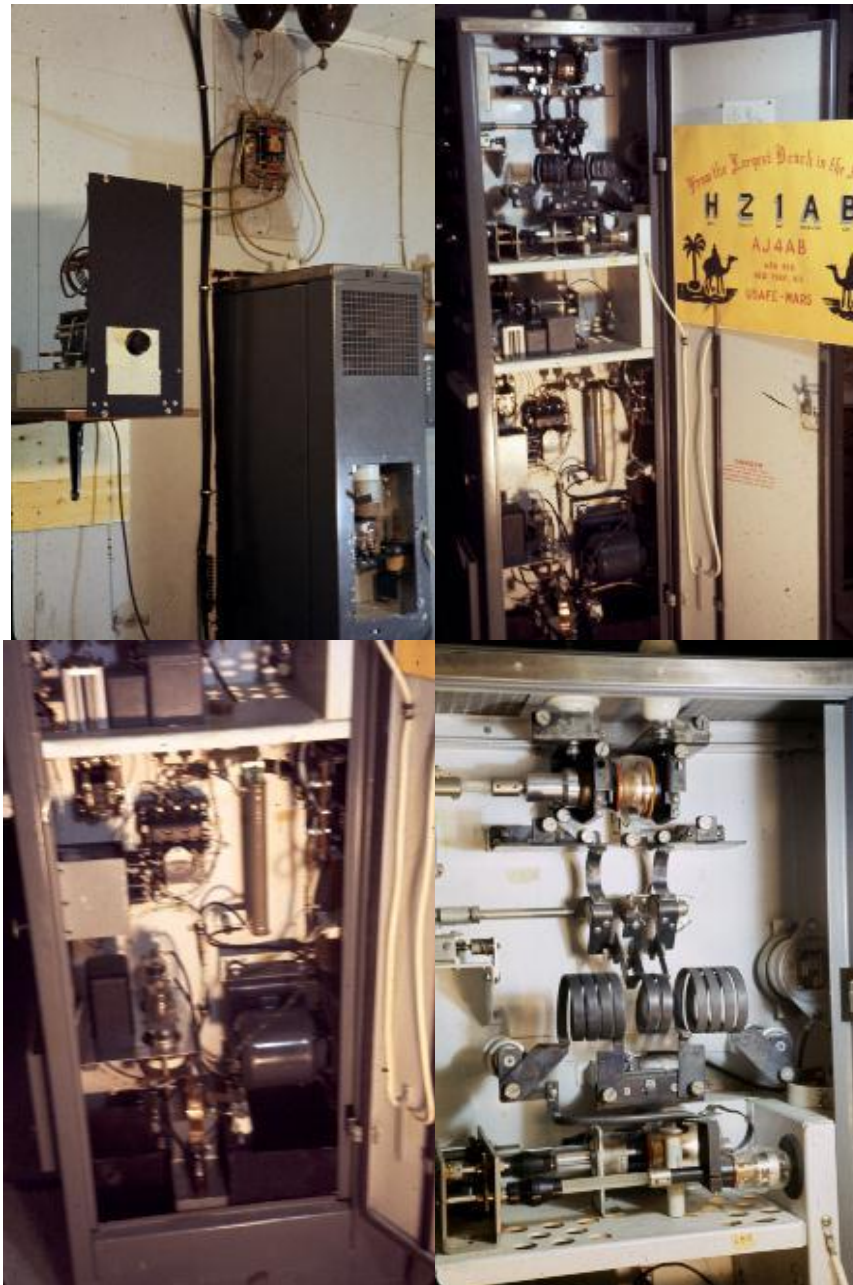


Cliff, 7Z3AA



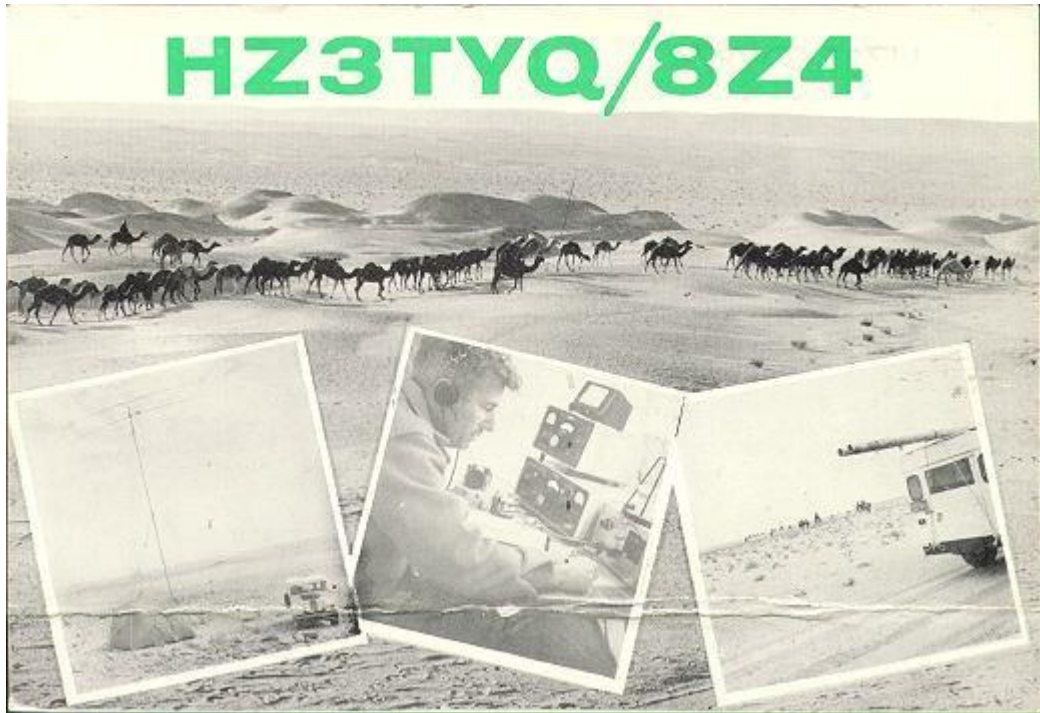
Vic answering cards

Shelby doing QSL chores



The MW-2 Amplifier, see Cliff Swann article above.

1965, Vic Crawford, W1TYQ/HZ3TYQ, Expeditions to the Neutral Zones




Saudi Arabia - Iraqi Neutral Zone. 4 days January 1965, 1,340 QSO and 71 countries from an unheated tent in high winds, rain and 20-30 F (-6.5t to -1 C).



Saudi Arabia - Kuwaiti Neutral Zone. From oil camps at Khafji, May 1965, 1,080 QSOs and 55 countries.





Neutral Zone Expedition was carried out by the Royal Jordanian Radio Amateur Society in celebration of HM JY1 44th Birthday 14.Nov.79. Operation was from 10-21.Nov 79. Total QSO 40,800 on Five bands ssb & cw. Special thanks to HH Prince Talal HZ1TA.

<u>JY Operators</u>	<u>Visiting Operators</u>	<u>QSL Manager</u>
JV4MB JV3ZH JV5US JV9BB	J28AA HZ1TC	WA3HUP
JV4NA JV4VJ JV5MK JV90D	9K2DN 9K2CM	73 <i>Henry</i>

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card design by JY5US

8Z4A QSL confirmng QSO with K5KG in 1979. This was a Jordanian-led Dxpediton with special thanks to Prince Talal, HZ1TA.

1970's, Review

Not much information exists from this period, I have found the following

1977 - Bill Gary, K8CSG (SK) and Al Chisholm, W5CA, Sgt Joe White, a pilot, John Dudek. Leo, K8PYD is Bill and Al's QSL mgr. In April 1977 the station was moved to two story building near the restaurant at the site, equipment: Collins KWM2A and 30L1

(K5KG Note: K8CSG is now held by Susan C. Gary, Bill's Daughter.)

Early 1979 - Station off the air

Late 1979 - The station was moved to the "back room" and set up by Richard Weiss, N7CXB.



"Don" Donald McCoy, W0DM then WA0HKC, 26 Dec 1979

Don says that he was working 2 years in Saudi, about 130 miles out of Dhahran, Don visited HZ1AB once during his stay. Here we have a good picture from the end of the 70's and beginning 80's, Don mentions ". I remember a huge Rhombic was used".

Editor's comment: The table on the picture served us until the very end, the Accu-Keyer (just behind the mic.) that K7JJ, Dave ordered and K4RX, Terry bought when Terry was working in Houston for ARAMCO, Terry was later posted in Dhahran. The Accu-Keyer served us (me) until the end.

(K5KG note: Don McCoy may be a SK, as W0DM has been reissued, and Don is not shown with any other call sign.)



Robert Walsh, WA8MOA (1980-85)
I would make this picture of HZ1AB circa 1979-1980.

The pole is the terminus of the 3 wire Rhombic which was 280' on a side. I have climbed that pole and have ruined a shirt on that pole, I still have the shirt.

The mercury vapor lighting was not maintained, hence the super high noise levels which hampered 160-meter operations (and all others at night). S-9 noise was not uncommon. The DX stations could always tell when the noise was off, as the QSO rate went up geometrically.

Editor's note: This is the old Rhombic, as can be seen the pole also carries a 6-el. beam, the new Rhombic is described later. First time I see a picture of this location, the old ones will give a smile of recognition and the newer ones will not recognize it at all, the place is totally re-built. This was our Gateway, in many ways.

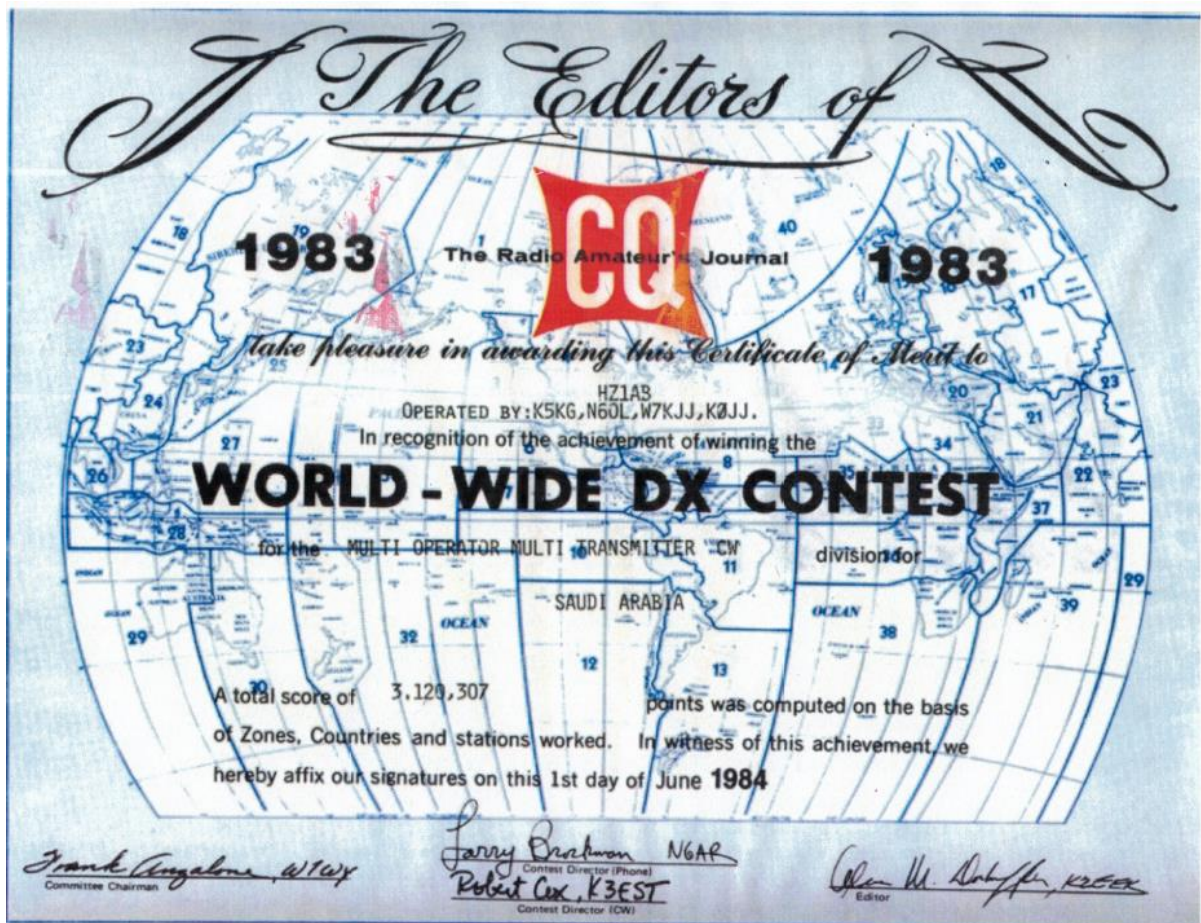
1980's, Review

1980 - The club DARC was formed; first President is Jim Adams, WA0LSB. Leo, K8PYD is made sole QSL manager.

Aug 1985 - The building where the station was, is taken down, QRT.

June 1987 - Back on air, from the location where I (SM0CXU) joined the club, this is the second last location of the club. Two rooms plus toilet and shower and full kitchen facilities.

1980's Station Set-up



1983 CQWW CW MULTI Operation by K5KG, N6OL, W7KJJ and K0JJ

Sam Seikaly, WA6BRE

Sam, WA6BRE, was one of our stalwart members in the 80's. We recently contacted Sam, and he provided the following photos. Sam lives in Norfolk, Nebraska. He would love to hear from his friends that he "served time" with in Saudi. Address, see qrz.com.



Sam operating Collins S-Line driving a SB-220. Antenna: Rhombic

1981 Terry Posey, K4RX



One of the first visits by Terry. Terry's final exit was end 1994 or was it start 1995.

1983, Visit by the YASME Foundation

Lloyd, W6KG and Iris, W6QL. The Colvin's visited HZ1AB and operated the ARRL CW contest, 19-20 Feb 1983.



The Colvin's, picture taken 1993



Card used by Lloyd and Iris Colvin for their 1983 ARRL CW operation

THE YASME FOUNDATION
P.O. BOX 2025
CASTRO VALLEY, CALIF. 94546
UNITED STATES OF AMERICA

CONFIRMING QSO WITH K5KG
 SWL REPORT

DATE			UTC	MHZ	2 WAY		RST	IRIS COLVIN W6EL	LLOYD COLVIN W6ED	Dave Earnest K7JJ
DAY	MONTH	YEAR			CW	SSB				
19	Feb	83	1409	14	✓		599			✓

QSO VERIFIED BY:
 CAROLYN, WA6AKK MAC, W6BSY

This by Dave Earnest, K7JJ (SK) and covers the "YASME Foundation" arrival and visit to HZ1AB it is worth a re-print. Dave tells:

I guess it was the winter of 1981 or 82 (Feb. 83. Ed), can't really remember. Anyway, I distinctly remember the family was all sleeping in our house in Dhahran Hills (Aramco) when I was awakened by a phone call that went something like this.... "Hi Dave, this is Lloyd", I answer "Lloyd who?", and it went downhill from there.... my old buddy Bob Walsh, WA8MOA, gave Lloyd and Iris my phone number (without telling me).

Anyway, Lloyd and Iris were in A7 (Qatar) and were heading our way. Could we meet them etc. etc. These two really had the tenacity and managed to arrive in Saudi Arabia with their Radio equipment (which was immediately locked up by the Saudi customs).

The Colvin's had the foresight, years before, to have a business arrangement with a Saudi Company. As a result, they were able to get visas on short notice, I assume out of the Emirates somewhere. Apparently, their company did stuff with a Saudi company at one time.

I met them at the airport and took them to the International Hotel at the airport, as no one was prepared - at this time, to put them up. I had a house full of kids and being late at night, I couldn't very well start waking the troops up!

Subsequently, Gerry and Judy Johnson, K0JJ provided them with a bed in their home, a couple of blocks away from me, in the Hills.

We did enjoy their stay, had a nice party for them. They operated from HZ1AB in the ARRL CW contest and YASME handled the cards fro that operation (shown under the QSL Collection - Ed.).

Unfortunately, they could not swing operating permission or release of their equipment for additional operation. You gotta luv 'em! They sure got further than anyone else would have.

In retrospect, this was a highlight for a lot of us local hams. I checked all my personal home logs and am kind of bummed that I have only worked them once - in the mid 60s when they were in KX6 someplace. I have had more eyeball QSOs with them though.

Someone should write a book about their expeditions over the years.

73,
Dave Earnest, K7JJ
May 2, 1977

Comments by the Editor (SM0CXU)

Dave left before I joined the club, but we had the pleasure to see each other at my first visit to Dayton Hamvention 1998. I remember it was a warm day and we talked old times over a beer at one of the corners of the exhibition halls, Terry Posey (K4RX ex N4KT) was also with us.

Regarding the Colvin's, I remember that one-time mid 1990's I checked in on the Southeast Asia Net (SEA-Net), after I checked in with "HZ1AB - 59", there was a lady calling "XU?? - Traffic", we were given a frequency and there I had a chat with - the Old Lady - Iris!

SEA Net meets every day on 14,320 at 12:00 GMT and has an annual convention, usually November. When I was in that region, I joined the conventions 1973/Singapore (where I met the very first Spratley is. expeditioners), 1974/Manila and 1975/Kuala Lumpur and 1977/Bangkok.

HZ1HZ Ahmed Zaidan (SK)

Ahmed - HZ1HZ is the "Grand Old Man" of Amateur Radio in Saudi. Here follows some facts from www.qrz.com. See also re-print of my article in CQ - Contest later in this book, in case of deviations between this and the article, this information takes precedence.

HZ1HZ, Ahmed M. Zaidan has been licensed since 1949, he was born 1914 (90 years old now!) in the Holy city of Mecca. Graduated from the Radio Technical Institute in Jeddah, 75 km west of Mecca. Started as a radio operator in Riyadh where he later occupied several high posts in the PTT, the last of which was the Deputy Minister of Communications. Ahmed now resides in Jeddah.

Ahmed Zaidan (HZ1HZ) has been active on both CW & SSB contests single operator, all bands since 1949. He is also working satellite traffic. Ahmed has four sons, Faisal (Member of government advisory counsel), Mohammed, (Managing director of E.E.C.C.), Abdulaziz (Managing director of Beta), Ziyad, (Managing director of I.D.E.A. center).

Ahmed's activities in the fields of telecommunications: He represented Saudi Arabia in all the ITU conferences and meetings since 1956. He was elected a member of the ITU Administrative Counsel for Saudi Arabia and chaired the Counsel 1967, chaired the Asia & Oceania's Planning Committee until he retired in 1972, 1978 he received a Diploma of Honor from ITU.

1984 Reception for Shaikh Ahmed Zaidan, HZ1HZ

From K7JJ web



The group with HZ1HZ

BACK ROW

- 1 ?
- 2 ?
- 3 Walt Marshall, W7SE
- 4 Peter Bacon G3ZSS
- 5 George Wagner, K5KG
- 6 ?
- 7 ?

MIDDLE ROW

- 1 David, G4FTC
- 2 Derek Brown, G8ECI
- 3 Ahmed Zaidan, HZ1HZ
- 4 John Clausing, KS6EZ
- 5 Richard Chamberlain, G6LIH
- 6 John Koenrich, OD5CD
- 7 Robert Wilkinson G3VVT

FRONT ROW

- 1 Terry Ellass, K9TRE
- 2 Al Chisholm, W5CA
- 3 Norman Fowlkes, K8ANZ
- 4 Bob Walsh, WA8MOA
- 5 Don Mayhall, N5DM

Ahmed, HZ1HZ with Dolores, KA7MPB and Walt Marshall, W7SE in March 1984



Ahmed, HZ1HZ with Carole, KS6EY and John Clausing, KS6EZ



1999, Article in CQ Contest, October 1999 about HZ1HZ, Ahmed Zaidan

A Conversation With Ahmed Zaidan, HZ1HZ, By Thomas Carlsson, SM0CXU @ HZ1AB

Shaikh Ahmed, HZ1HZ, has been an active DXer and contest operator for a very long time. To meet this Grand OM and to work him on the air is always a pleasure. At his venerable age of 86 we still can hear his CW signals crisp and clear.

A week after I met Shaikh Ahmed, I received the July/August issue of *CQ Contest* in which HZ1HZ is mentioned as a participant in the fourth CQWW Contest 1951. On a brief business trip to Jeddah, I had the pleasure of meeting Ahmed, and here follows what he had to say. I only wish I had more time to spend with him.



Ahmed, HZ1HZ and the interviewer, Thomas, SM0CXU/HZ1AB

CQ Contest: Shall I call you Shaikh Ahmed, or how do you wish to be addressed? (In Saudi Arabia “Shaikh” is a title used to address dignitaries” – ed.)

HZ1HZ: Well, it is not important. Ahmed is okay. I have been back for a week from a vacation in Europe, and when I was checking in on a flight, they could not find my reservation. With a closer look they found me listed as Shaikh Ahmed instead of Ahmed Zaidan, so the title can sometimes cause problems.

CQ Contest: How were you introduced to radio?

HZ1HZ: I was studying at the Technical University in Jeddah, and in the beginning of the 1930's the technology was based on spark transmitters, etc. The spark transmitter technology had to be abandoned at this time due to the interference it caused. The advisor to the late King Abdul Aziz, Dr. Philby, was then ordered to look for replacements. This was now an urgent issue, so an agreement of a quick delivery with Marconi, in England. This agreement also included that the staff should be ready and available to handle the equipment upon its arrival.

The equipment arrived installed on a truck with radio equipment and generator. I was the operator and director of that unit. This was the means of communication that followed the King when His Highness traveled about in the Kingdom.

CQ Contest: When did you learn about ham radio?

HZ1HZ: Around the war time (WW II), I was stationed in Dammam (close to Dhahran), where I later was regional director of PTT for the eastern province of Saudi Arabia. Radio was the only means of official long-distance communication back then. I built my first transmitter using a crystal-controlled 6V6 and later added an 807 as an amplifier, but I found no one to contact. From foreign radio magazines I learned how to move the crystal frequency by grinding it or by adding graphite on it. It moved, but not to a frequency at which I could make QSOs.

I got advice and hints from a British officer. This, among other events, led to my being sent to London to be introduced to radio regulations to set up the rules here. One of the advisors in London was the president of the RSGB, and he was the one who really introduced me to ham radio and contesting.

During the period 1948-49 I moved to Makkah, and with more knowledge than before, I tuned one crystal to one of the bands and sent a CQ on my homebrew transmitter. The receiver was a British R1155. I got an answer from what I think was an Italian station, and I was very surprised. *(Here I commented to Ahmed that as a student back in 1960, I also used an R1155, a homebrew 6V6 crystal-controlled oscillator, and a PA with 807, I was using surplus, and he was using high-tech equipment for his time – ed.)*



Ahmed, HZ1HZ. The picture on the wall is of King Feisal.



The HZ1HZ antennas

CQ Contest: Have you always been HZ1HZ?

HZ1HZ: Yes, I have had the same call from the beginning. I chose "Saudi Arabia 1 Saudi Arabia."

CQ Contest: Shaikh Ahmed, have you been a deputy minister?

HZ1HZ: Yes, I was Deputy Minister for the Ministry of Communication (PTT) and represented the Kingdom of Saudi Arabia at the ITU, where I held a seat at the Administrative Council. Therefore, my ham radio activity was at times hampered by these important duties.

CQ Contest: what is your preferred contest? I am always very happy to get your QSOs in the contests, as it is the only possible way for me to get a home country multiplier now that Mike, 7Z500/K3UOC, has left.

HZ1HZ: Well, I have no preference, but I like CW better than SSB. Our contest QSOs also gives me a multiplier for HZ. *(At this point Ahmed showed me one of his vintage QSLs, where he states that he was the winner of a section of the ARRL Contest in 1950 – ed.)*

CQ Contest: I see that you have a computer now. Are you contesting with it? When I asked you a few years ago, you said you are too old.

HZ1HZ: I am trying my best. I have Internet access now, so I am playing around a bit. However, I am not yet ready to use it in contests, as my typing is too slow.

CQ Contest: What is your present setup?

HZ1HZ: For HF I have a Kenwood TS940S and an Alpha 87A linear, and the antennas are a TH7-DXX and a sloping multiband dipole for the lower bands. I also do some satellite communications.

CQ Contest: What about the future?

HZ1HZ: Well, I hope that my good health will continue and that we will meet each other in future contests.

Additional information: I contacted Ahmed, September 2004, and he informed me that he has been off the air for a while as his antenna (TH7-DXX) is a bit "sick", he has serious plans for a replacement.

Off the air as the building was torn down and new shack had to be found

1988 - 1990, See the "Long Path" Newsletter Review

1991, Erection of the Rhombic

Jeff Hambleton contributed, from K7JJ web.

Rhombic erection - after lowering the first Rhombic pole into the 12-foot hole with a crane, somebody said, "How do we get the wire off the top?" Everyone looked around and all eyes were fixed on the only able bodied, less than 20 stone guys within three hundred yards. Terry was our best climber but was currently on crutches having had a close encounter with a motorcycle in Hong Kong.



I slowly climbed the 90-foot pole. It was mid day, very hot and I was unfit. Anyway, I got up there and released the wire rope from the top of the first pole. When I got down, I was totally exhausted. Climbing a pole is not the same as climbing a tower. The base of the pole was about two feet in diameter, so you are leaning back with your feet at different levels on the foot spikes.



Most of the team had gone over to the shack for drinks and had left me there still only halfway down the pole. The first 15 feet didn't have foot spikes and was the most difficult. Eventually, I managed to reach the ground and virtually crawled back to the shack. I was so knackered that I consulted Jim Tankersley, HZ1AB's resident pediatrician. He said I was suffering from sever dehydration and quite a bit of knackeration and recommended that I don't do any more climbing this day. After a good rest and a few sodas, we returned to the Rhombic. The crane driver was just lowering in the second Rhombic pole. After some gentle persuasion from the guys, I still refused to climb again so the contractors for the crane and concrete mixers decided to go and get another crane to finish the job. At first the contractors tried to make liftable platform but after getting about halfway up the pole decided to come down again.



As I was the proud owner of a body harness, a new one, I suggested that I get lifted by the second crane to release the wire rope after the poles had been lowered into the holes. This became the procedure for the remaining three poles and was Jeff's major contribution to the Rhombic erection. The three pictures show this unconventional step in the construction of a Rhombic.

The Rhombic:

Rhombic antenna design and data:

- Length 850' (259m)
- Width 285' (87m)
- Height 82' (25m)
- Optimal frequency 14.000 MHz
- Gain at 14,000 MHz 19.15 dBd
- Optimum Takeoff angle 12.4 deg.
- 3 dB Horiz. Beamwidth 15.2 deg.
- Half Apex Angle 18.5 deg.

MHz	Gain (dBd)	Take Off angle	Horiz. Beam/W	Rad. Res. (ohm)
7.125	13.54	24.9	43.5	478.4
10.125	16.78	17.2	27.6	562.7
14.200	19.28	12.2	14.8	643.9
18.400	20.30	9.4	7.8	706.1
21.200	20.12	8.1	5.2	740.1
24.940	18.74	6.9	3.9	779.1
28.500	15.95	6.0	4.7	811.1

The data is based on calculations from 1990, will the present EZ-NEC give the same results, I feel they will not be far off because we were heard. However, at times we could not hear well due to QRM from, what we believe, the nearby hospital, there the Beverage served us handy, also on high bands. If you model it, don't forget to taper to small segments at the corners!

The Rhombic was switchable for short and long path to mid USA. Each end of the Rhombic was fed with a 600/50-ohm balun and buried 7/8-inch Helix cables, one of them connected the station and a 50-ohm dummy-load (Heathkit Cantenna) connected to the other cable.

1991, Big Antennas for a Big Station!

From K7JJ web.

The images are courtesy Jeff Hambleton, G4KIB. Jeff is now living and working in Thailand and since then moved to Germany.

The descriptions of the photos were furnished by Terry Posey, K4RX, who was very involved with the conception of this system. Terry now lives in Florida.



Erecting the 130-foot tower. Riggers are Filipino workers.



Pole in center is one of the 90-foot poles supporting the famous 850-ft (259m) long Rhombic. The Rhombic was pointed on W0-land, see the Rhombic data. On the right is the log periodic used successfully on 30 and 40 meters.



Yagi stack is as follows: Top, Homebrew 3 el 17-meter monobander
 Middle, homebrew 4 el super wide spaced 12-meter monobander
 Bottom, KLM KT34XA (painted with varnish)

The 1500-ft 2-wire (switchable short path and long path) Beverage ran along the compound wall on the right had side of the left photo.



The yagis going up. Thomas, SM0CXU and Terry, K4RX, on the cameras.

1989 – 1993 Some of the Members

From K7JJ web



Jeff Hambleton, G4KIB.



Ken Dyer, GW0RHC.



Joe Mitchell, K4AW.



John DeHart, K1VBM



The HZ1AB shack and Thomas, SM0CXU, at the controls.



Another view of one of the positions. At right, is the good old RF Communications RF-103 amp (single Eimac 3-1000Z)



Andy Digby, GØJLX, 1989 - 1990

1994, The Old and New Shack

From K7JJ web
Photos by Ken, GW0RHC

These are pictures from the old and new shack, last operation (from both shacks at the same time) was during CQWW-CW 1994 where we did the Multi Single class, the stations were more than 500m from each other but were on the same "owner's plot" and connected by wire. We had rolled out a pair-cable and connected the logging PCs with modems. Some time after the contest we had to abandon the old shack as it was to be taken down to give place to new buildings.



Here is Ken, GW0RHC, at the HF operating position. Old shack



Satellite antenna and the Satellite operating position. The antenna was built by Ken/GW0RHC, Vic/KE4AQU (now KC6VAO) and Rick/KH6SAT. It was made using 1/3 of an oil drum and a 4-inch plastic pipe filled with concrete. New Shack



Some of the members from 1994. (L-R) Dave-K3DTU (President, HZ1AB), Jeff-G4KIB (now in Germany), Kathy-KC5VVI, Carl-WA5GZI, Charlotte-XYL & Dick-W5GVM. Note: Dave K3DTU, went SK in 1999.



The rotating horizontal log periodic antenna at 60 Ft (18 m). New Shack
The yellow hut at front housed the generators that came to use when the mains cable to the shack was cut between Nov. 2002 - Jun 2003. Note the diesel tank.

1994 – 1995, HZ1AB Contest Operators

From K7JJ web

C4C – Cyprus Expedition 1994

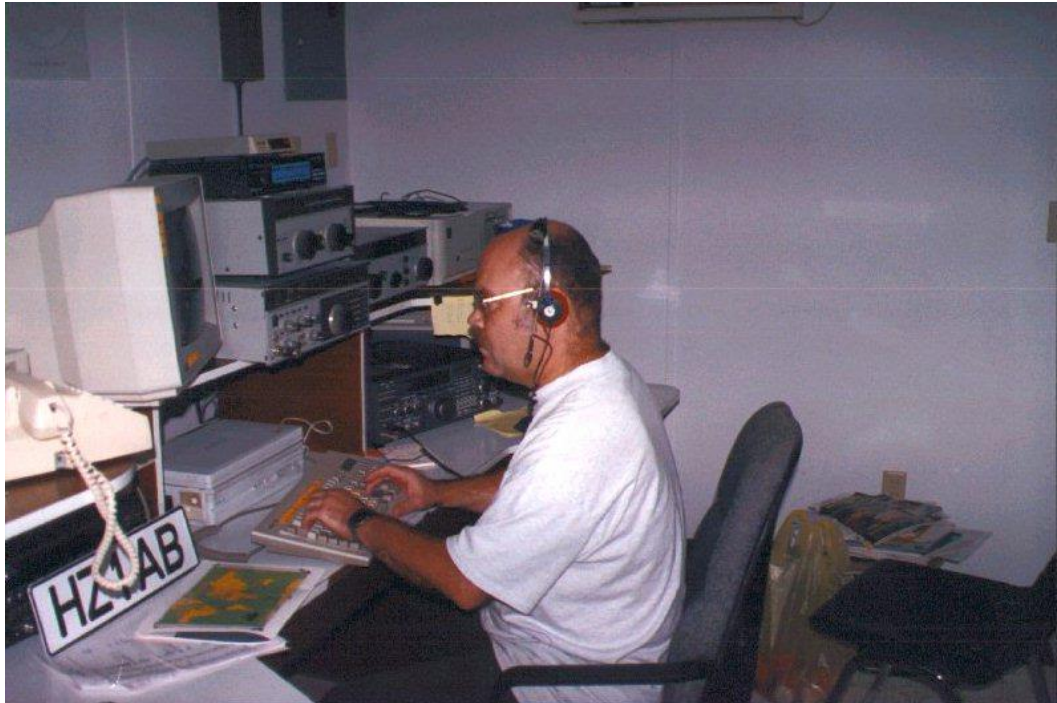
At Jeff Hambleton, G4KIB/5B4YY QTH, Paphos, Cyprus



SM0CXU, Thomas. G4KIB, Jeff. K4RX, Terry
WAE-CW 1994 – All time high MS outside Europe.

CQWW-CW M/S 1994 - #5 World

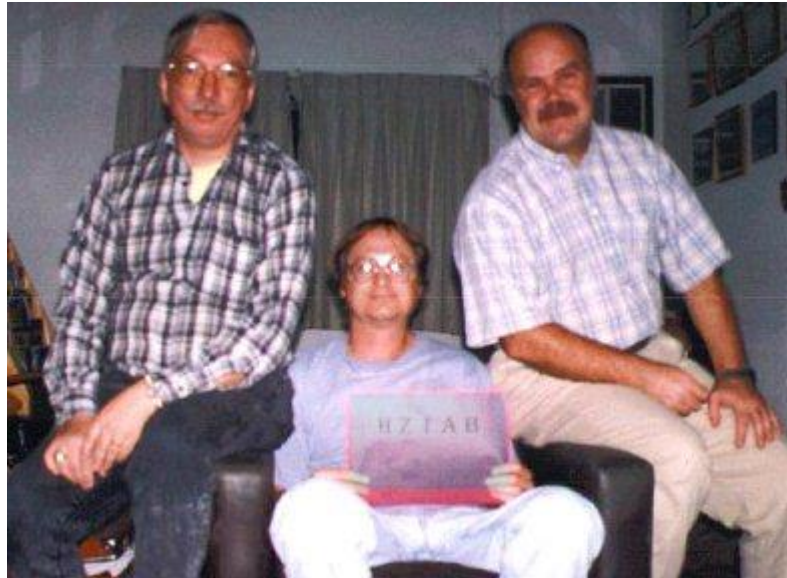
We operated from both the old and new shack, the tower with the KT34XA had been taken down due to housing construction. The station 1 at the old shack had the Rhombic, and the Beverage. At station 2 at the new shack, we used the Log Periodic (6.5-30Mc) and some dipoles for the low bands. The distance of approx. 800m between the shacks was connected by means of a pair-cable laid on the ground for the modems to connect the logging computers.



Bengt, SM5CCT. HZ1AB station 2.



Terry, K4RX. HZ1AB run position, station 1



Thomas, SM0CXU. Terry, K4RX. Bengt, SM5CCT – After the Contest

1995 CQWWCW SOSB 20 Meters 1995 - Thomas, SM0CXU

#6 World, #1 Asia, All Time High Score Zone 21.



SM0CXU...The eye of the Contest Tiger!!

1995, Mike Grosko's, K5VK - Photos

K7JJ web

Note that the Force 12-5BA was not yet commissioned, which happened 1999



Mike Grosko, K5VK (MSgt USAF Retired) Op. HZ1AB, 1995

Vice Admiral Scott Redd, USN, K0DQ/A92Q



Mike's visit to Bahrain. L-R, Vice Admiral Scott Redd, A92Q/K0DQ, Scott's XYL, Mike K5VK and Scott's son, A92MM.



Vice Admiral Scott Redd, USN. K0DQ/A92Q

1994 – 1996 The Stations



Above photo shows the typical station configuration from 1996-2004. This picture is taken during CQWW-CW 2001

The consoles were built by W7SE (SK), Walt Marshall. Equipment, left to right consoles: PC with Great Circle map and Greyline (Geoclock) beside it is Thomas (SMØCXU) Laptop with K1EA CT that was used during contests, under is the logging position. Mid console; Nye Viking antenna tuner, Ten Tec Titan kilowatt amp, Kenwood TS-940S transceiver, speaker and, an Accu-Keyer. Rightmost console contains the antenna switches, the antenna patch panel can be seen at the back of the center console. Off the picture are an old RF Comm RF-103 (single 3-1000Z) amplifier and other commercial ham gear including full setup for satellite communication. This setup was in a portable building. The antennas used were a small rhombic, rotatable horizontal log periodic and a Force 12 5BA.

Between Dec 1994 and Mar1996 we were at both the old and new location, the old one mainly used for meetings and storage. Operations from start 1995 at the new location as the tower with the beams and the south pole of the big Rhombic was taken down. The small rhombic now used had 50m sides, the big one is described earlier.

(K5KG Note: The operating consoles originally built in Saudi by Walt, W7SE, were later to moved to his retirement QTH in Laramie, WY, when he retired in 1994. Also moved to Laramie by Walt, was the entire collection of HZ1AB QSL cards that had accumulated in Saudi. After Walt's passing in 2019, the HZ1AB QSL collection was packed up and moved to DoKuFunk, a communications museum in Vienna, Austria. It was Walt's dying wish that the HZ1AB QSLs "be sent to Austria". Some \$2,000 was donated by ex-HZ1AB operators and other hams and organizations to fund the cost of this project which was carried out by a team of local Wyoming hams led by N7WY, W8MYL and others, including Dolores, Walt's XYL.)

1995 - 1997, Heinz Bode, DM2BHG ex. DL9MHG



MANY THANKs
TO ALL AUTHORITIES AND MEMBERS OF THE
DHAHRAN RADIO CLUB
FOR GIVING ME THE OPPORTUNITY TO OPERATE

HZ1AB

FOR THE PERIOD OF JULY 1995 UNTIL MAY 1997

DURING THIS TIME I RAN 9,984 QSOs, SUCH AS:

433 on 80 m	724 on 40 m	1366 on 30 m	3426 on 20 m	2588 on 17 m
834 on 15 m	322 on 12 m	56 on 10 m	235 via Satellite	

MNI TNX FER ALL - BEST DX - HP CUAGN - 73 DE

Heinz
DL9MHG

ex: DM3ZDG (1961), DM3DG (1962), DM2BHG(1964), 4W1BHG(1972)
Y32ZG(1982), Y22HG(1982), Y86AFS(1986), Y35G(1987) OK8I
OK8DAG(1988), DC/Y22HG(1989))

Heinz did a lot of QSOing during this period, Paul, G7SLP also active and did a lot of antennas.

Heinz' impressive statistics, whit not so spectacular antennas and a semi-repaired Kenwood TL922 amplifier:

433 – 80m	724 – 40m	1366 – 30m	3426 – 20m	2588 – 17m
834 – 15m	322 – 12m	56 – 10m	235 - Satellite	Total 9,984 QSOs

1989 - 1997, HZ1AB, as I Remember it

by Thomas Carlsson, SM0CXU/AB5CQ
Edited by Mike Manafo, K3UOC/7Z5OO (SK)

This article was written 1997 as operations at HZ1AB had come to a temporary QRT during the period 1997 to 1998.

I was introduced to HZ1AB in 1989 by K4VBM, John DeHart. At that time, N0AE Brion Gilbert was the president, KG6DQ Herb Klemme was the Secretary and K4RX (ex-N4KT) was the Treasurer. Club meetings were held the first Monday of each month and the Friday meetings (being our day off) started with a breakfast and were frequently attended by most of the members. During this time HZ1AB was very active. Terry K4RX, did much of the operating and I participated often in the major contests. As I'm sure you know, our weekend over here is Thursday/Friday, so participation in a contest means days off from work. In some cases, this was solved by working contests in the Multi Op. category with one or more of us working on Saturday and the other(s) on Sunday.

Then came the Gulf war in 1991 and that temporary put us off the air. Keeping us QRT inspired a healthy desire to return to the air in a big way. More than likely, this planted the seed that grew into a major antenna project. N0AE, Brion was the driving force that coordinated this project. He urged the club members to work long hours during many weekends. K4RX, Terry did the major antenna design work. From these work parties I remember the following club members. I'm sorry if my memory fails and I have left someone out:

N0AE	Brion Gilbert
K4RX	Terry Posey
K4VBM	John DeHart, who coordinated the important task of water & soft drink supply
G4KIB	Jeff Hambleton, our in-house tower climber
K3DTU	Dave Shepard, our current president, now SK
WB7TTX	Ron Holtane
W7SE	Walt Marshall (SK)
KC5PF	Bill Mills
AA6OB	Merl Service

The antenna projects eventually resulted in the following:

An antenna patch panel where any antenna could be connected to either of the two HF stations

A 42-meter tower with:

- a KT34XA for 14/21/28 MHZ
- a 3 el monobander for 18 MHZ
- a 4 el monobander for 24 MHZ
- a support for a Delta Loop for 160 meters

The Rhombic:

This incredible piece of work was 270 m long and 105 m wide at 21 m height and 3 loops of wire. It was terminated at each end with a 600/50-ohm balun and aimed at the central USA, passing through Europe on its way. Why a 600/50 Ohm balun? Because we had a run of coax (5/8" heliax) to each end of the rhombic and by feeding one end and having a 50-ohm dummy at the other we had a 600-ohm terminated Rhombic that we could aim in two directions: USA short and long path.

Beverage:

Two parallel wires, 630 m long, the direction being approximately the same as the rhombic, and switchable in either direction.

Log Periodic:

6 - 30 MHZ at 18 m high

Of the above, only the log periodic is still operational although it now needs repair. The log doesn't work on 7 MHZ anymore. To cover 40 meters, a temporary vertical has been erected. The rest of the antennas had to come down because of buildings going up where our antenna field once was. The 1994 CQWW CW Contest was our last effort with the rhombic. Two months earlier, the 42 m tower had been dismantled.

I moved to Riyadh in 1994 so I only occasionally visit HZ1AB nowadays. Activities there are limited due to the antenna situation. At last report, all the linears are out of order and the FT-990 belongs to K3DTU who has it on loan to the club. Dave will be leaving for good in August, 1997 and will take the 990 with him if the club doesn't accept Dave's discounted offer to buy the rig. If we will lose the FT-990, then all that remains is a faulty TS-940S.

In other recent news, GW0RHC Ken Dyer has recently re-joined the club. Together with some of the other members they are doing digital communication via satellite.

In reviewing old contest logs I find the following ones. Regretfully, not all the ARRL contests are included here:

<u>Contest</u>	<u>Mode</u>	<u>Category</u>	<u>Operator(s)</u>	<u>Comments (if any)</u>
CQWW 1983	CW	MM	K5KG, N6OL, W7KJJ (K7JJ SK), K0JJ	George, Nick, Dave (SK), Gerry
WPX-90	CW	SO	SM0CXU	.
CQWW-90	SSB	MS	DY1CSW, K4VBM, K4RX (ex. N4KT), N0AE, SM0CXU	.
CQWW-90	CW	MS	K4RX, SM0CXU	.
WAE-91	SSB	MS	K4VBM, SM0CXU	#5 non-Europe, first time using computer logging (CT)
SAC-91	CW	SO	SM0CXU	.
CQWW-91	SSB	MS	K4VBM, K4RX, AA6OB, KC5PF, N0AE, N7CXB, SM0CXU	.
CQWW-91	CW	MS	K4RX, W7SE, SM0CXU	3,755 QSO/4.5 M
CQWW 160m-92	CW	SO	SM0CXU	.
ARRL-92	CW	MS	K4AW (ex. KM4E), AA6OB, SM0CXU	.
WAE-92	SSB	SO	SM0CXU	.
CQWW-92	CW	MS	K4AW, W8UD, SM0CXU	.
CQWW 160m-93	CW	MS	K4AW, SM0CXU	.
WAE-93	CW	SO	SM0CXU	.
WAE-94	CW	MS	C4C from Cyprus. K4RX, G4KIB, SM0CXU	All time high non-Eu
CQWW-94, 80m	SSB	SOSB	K4RX	.
CQWW-94	CW	MS	K4RX, SM5CCT, SM0CXU	#5 World
CQWW-95, 20m	CW	SOSB	SM0CXU	#6 World, #1 Asia, All time high zone 21
WPX-96, 20m	CW	SOSB	SM0CXU	One day only

This list is mainly for the operators to remember when we had so much fun. Apologies to Terry for not having all the ARRL contest logs on hand.

A short note about myself: I have been working for Ericsson in Saudi Arabia since 1988. I am hoping to be here for more years yet to come so I can participate in future contest efforts from HZ1AB (rig and antennas permitting). My family includes my wife, a son, and a daughter, as well as two cats. Previous calls that I have held include VS6CU, 9M2CX, 9K2EX, HC2IA, and HC2EX/HC8. Presently I am SM0CXU and AB5CQ. In addition to being a member of HZ1AB, I also operate from 7Z1AB the US Embassy Amateur Radio Society (USEARS) here in Riyadh. Unfortunately, access to the 7Z1AB is severely restricted so there have been no recent contest efforts from there.

And a final note to Leo, K8PYD: How many times have I sent out your callsign to give the HZ1AB QSL route? I appreciate the work that you do for us, and I hope to see you some time.

1998 And Onwards

Despite it all, we came back to operate our station. At beginning we only had the Log Periodic that was not very reliable. Paul, G7SLP made some very impressive, fixed Delta Loops and Quads on the Log Periodic tower and another tower section had been raised to do as a vertical on 40 with plenty of 1.5 mm copper wire on the ground. Later Thomas added an 80m vertical element that ran to its top and had its end supported by a string to the Log Periodic tower plus several added copper wires on the ground for 80 m, as it is recalled, this was for the CQWW-CW 1999 effort.

During 1999 our President, Ken was the driving force to get the 40 m tower erected, and Thomas volunteered to buy a new antenna (with donations from other members) to put on top of it instead of the re-furbished KT 34-XA. Reason was to get out on all bands including the WARC bands. The choice fell on a Force12-5BA which boosts 3-el full size Yagis on the 5 bands from 20 to 10m.

The other antennas that served us up to the end: 160m sloping dipole with center up under the Force12. horiz. polarized Delta Loop for 80m, Sloping Dipole for 80m with center under the Log Periodic (up 18m), Steerable Double Delta Loop for 40m horiz. polarized, Steerable 160m Beverage with Coax Cable as antenna and finally the Log Periodic @ 18m that spanned 6.8 – 30 MHz.

If Paul had not been among us, we would never have had these antenna arrangements at HZ1AB to make us to hear well and make us heard.

The number of members decreased at alarming rates and at times we were down to include the officers only.



Picture taken 1999, from Left to Right: Paul Hardcastle, G7SLP – Delia, VE7HDW (Paul's xyl) – Manfred Reichert, DF1IK/HZ1IK – Dave Hart, AA6CQ – Dick McCarty, W5GWH – David Beare, GM3UPT.



Detailed study of the footing for the Vertical for 40 m



Usually we had a “meeting” including a proper breakfast at the Mission Inn, where this picture is taken, when the Inn closed, we did it at the Dhahran Int’l Hotel. Here we have: Brummett Carl, WA5GZI and Kathy, KC5VVI – Hardcastle Paul, G7SLP and Delia, VE7HDV – Rodgers Billy, WA5ZUQ and Gloria



Paul, G7SLP; eager operator, willing climber. Without Paul we could not have done our fine station set-up.



Delia, VE7HDV, possibly the first active yl/xyl operator at HZ1AB, Delia did a lot of QSOing with Paul as an eager Elmer



Leo Fry, K8PYD did us the honor of a visit Oct. 1999, he did the CQ-RTTY contest as SOAB and participated in the "Paul/Delia Farewell Party". So much attention was given to Leo and other things that most of us forgot that it really was their Farewell Party. Delia and Paul, we ask for your forgiveness – but we had fun and will be remembered by those present.



The two last serving Presidents of our club smiling happily, tightening the last screws/nuts, or is it rivets, on the new 5 band full size Yagi from Force 12. Ken, GW0RHC (Pres. 1999-2004) and Bill Rodgers, WA5ZUQ (Pres. 1998).



LeRoy, KD7BIA and Paul, G7SLP getting us closer to be loud on the bands. They are here on the 40 m level above the ground.

2002 April Meeting

Ken, GW0RHC and Steve, KA8GVS were living in Al Khobar/Dhahran. Thomas, SM0CXU/HZ1EX; Manfred, DF1IK/HZ1IK; Leo, WD6CVB (who also was the custodian of the US Embassy's 7Z1AB) and Emre, TA1I had to drive the 400 km from Riyadh, a trip taking some 4 hours. This time Steve and wife Yolly provided breakfast at their home before the meeting. Steve also proudly showed the Observatory he was building to house his fine astronomy gear. At this time Thomas had his FT1000mp at the club so the club's FT990 was rigged up as a second station. The two stations were cabled to have common logging.

Note that the private HZ-calls were not a reality until end 2004.



Here Secretary Thomas is reading the Minutes and President Ken listening.



Emre Somcag, TA1I smiling although he was complaining on Thomas and Manfred that they always operated pileups. This time we had a second station for others to enjoy.



Leo Bourne, WD6CVB handing out "normal" SSB QSOs

2004, September - The End

The station was taken down. Last QSO from HZ1AB was 07 May 2004.
The closure of a 57 year's old establishment.



Thomas, SM0CXU/HZ1EX and Ken, GW0RHC at the closure of HZ1AB, have a look at Ken's forced smile. Due to circumstances, we had to carry all equipment from the shack at top of the field all the way to the parking at main buildings, some 800m (approx 900 Yards). The only tool of transport was a small luggage cart. Many trips and plenty of sweat, the mood really wasn't what it looks at the picture.

HZ1AB Log Information

A list of all Soft-Copy files was collected into a common ADIF file and uploaded to ARRL's Logbook of the World (LoTW).

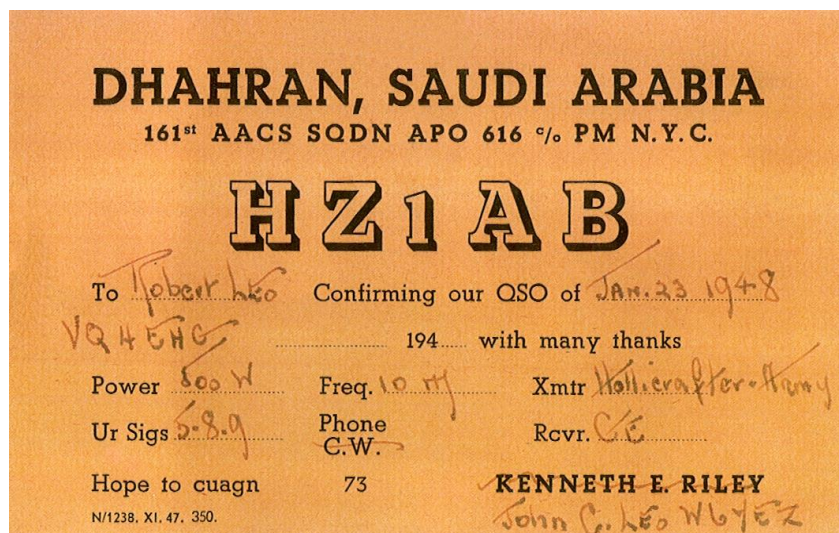
An additional file from a common logging program, DX Base, and containing some 15,000 QSOs that was used in the mid 90's was to have been uploaded when and if Manfred managed to do a conversion to ADIF. It is uncertain if this was done.

All other logs are with Leo, K8PYD.

QSL Card Collection



Received by VE4XO (now VE7WO for February 1947 QSO. 1st VE!



One of the early QSLs, printed Nov 1947 by Ken Riley, KE5TS (ex W5HFM).

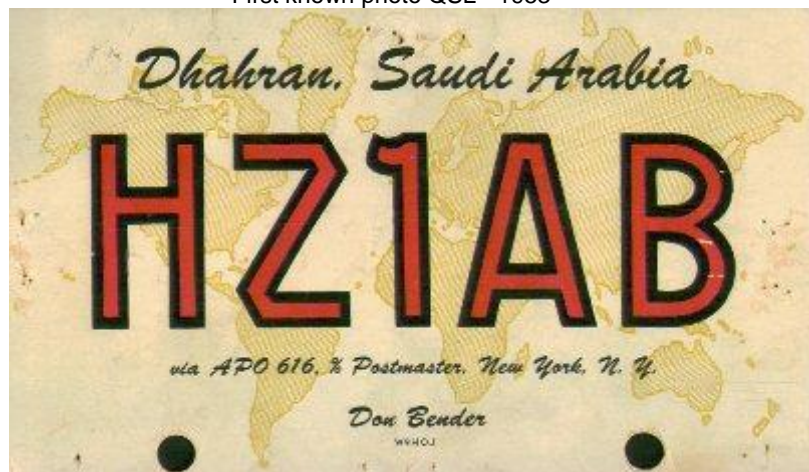
HZ1AB - Saudi Arabia
 Radio K5KG/M Confirming
 our QSO of 26 Nov 19 82
0021 GMT
 Ur 14.0 MHz, Sigs SS9
 AM-~~CW~~-RTTY-SSB-OSCAR
 Xmtr Collins Inp 1000 W
 Rcvr Collins & Drake
 Ant Beam & Rhombic
 Remarks:
THANKS GEORGE FOR
THE QSO
 Mail/QSLs via K8PYD for
 Dhahran Amateur Radio Club
 73, PSE QSL TNX
 Walt

Color QSL By K2RPZ Print - Box 412, Rocky Point, NY 11778
 78011-D

HZ1AB QSL from Walt, W7SE at HZ1AB confirming mobile QSO with K5KG/M



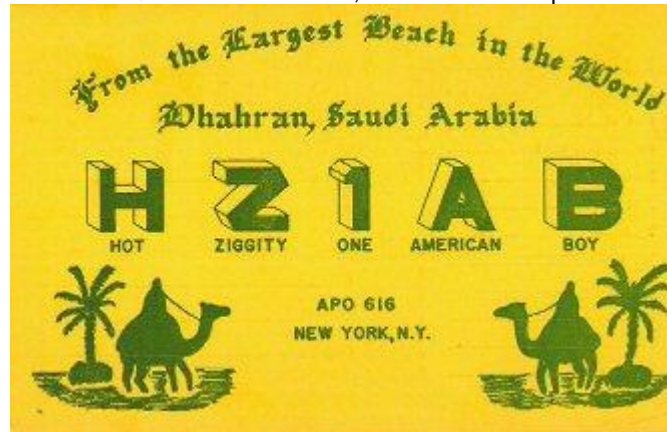
First known photo QSL - 1953



Received by W9ZR's father for March 1950 QSO.



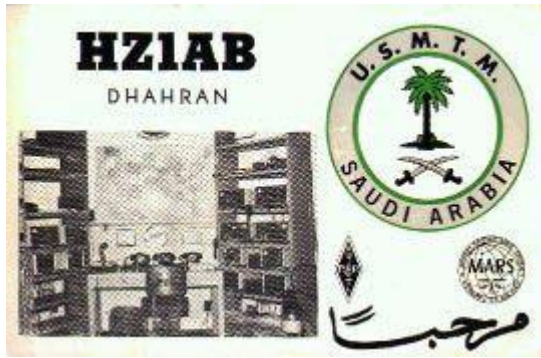
QSL used in mid-50's, Aramco Print shop



Early 60's hand crafted QSL. Done in various basic colors.



Photo QSL from mid-60's. Vic, W1TYQ. Jim, K3PUS. Cliff, W8GCN (now W5SMI)



US Military Training Mission logo card used in 70's

HZ1AB
 HQ USMTMSA
 ATTN: J6
 APO NEW YORK 09616

RADIO K5KG Confirming
 our QSO at 1.345 GMT.
 on 4 FEB 19 78 U.S.S.B./CW
 sig R.S.S.? T... on 1 F.M.C.

COLLINS KWM-2A
 COLLINS 30 L-1
 BEAM & DIPOLE

Thanks again for the fine QSO.
 All the best in the future and I
 hope we meet up again.
 Happy DXing.

73's [Signature]
 pls/tnx QSL.

To Amateur Radio Station
K5KG

G. Fritz, Scottsdale, Arizona

DHAHRAN, SAUDI ARABIA

HZ1AB

HQ. USMTMSA ATTN: J-6 APO NEW YORK 09616

TO RADIO	DATE	GMT	RST	2-WAY	MHZ
<u>K5KG</u>	<u>_____</u>			SSB CW	14
	<u>_____</u>			SSB CW	21
	<u>24-10-81</u>	<u>1424</u>	<u>59</u>	<u>(SSB) CW</u>	<u>(28)</u>

QSL MANAGER
K8PYD

TNX QSL 73, [Signature]

Plain-Jane QSL used by K8PYD, Leo, our QSL manager

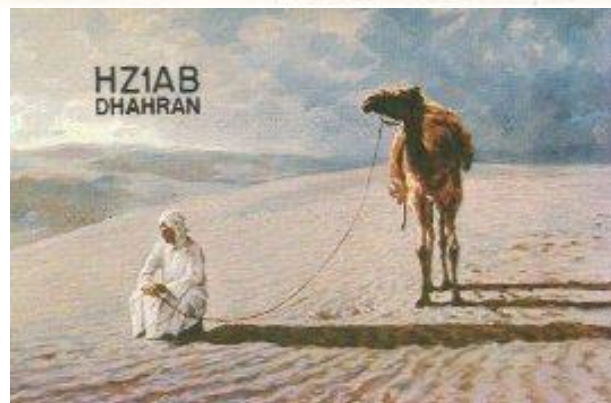
DHAHRAN, SAUDI ARABIA

HZ1AB

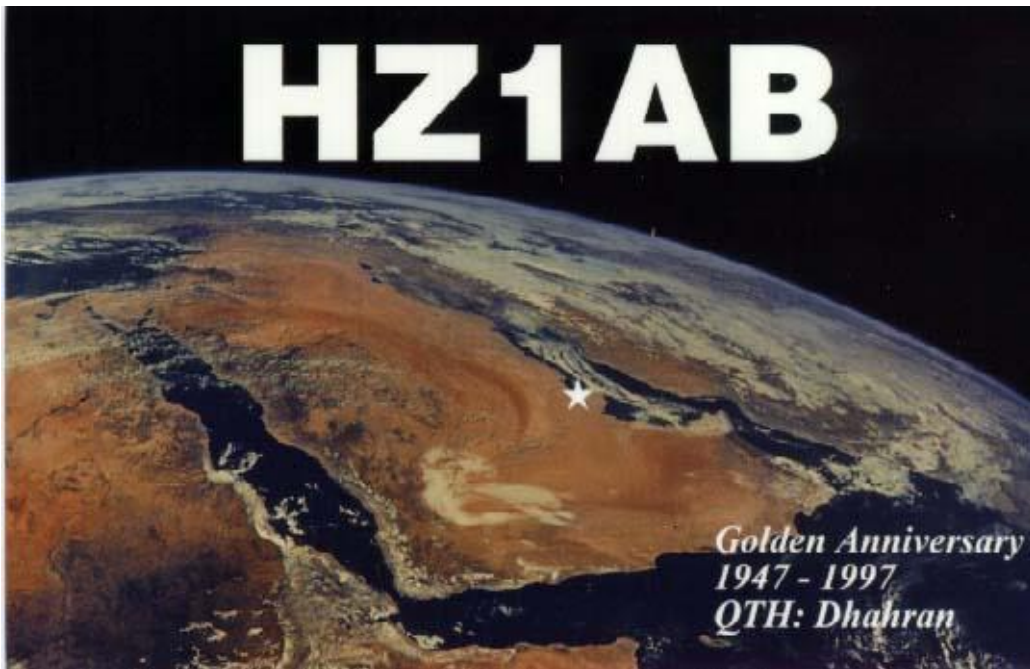
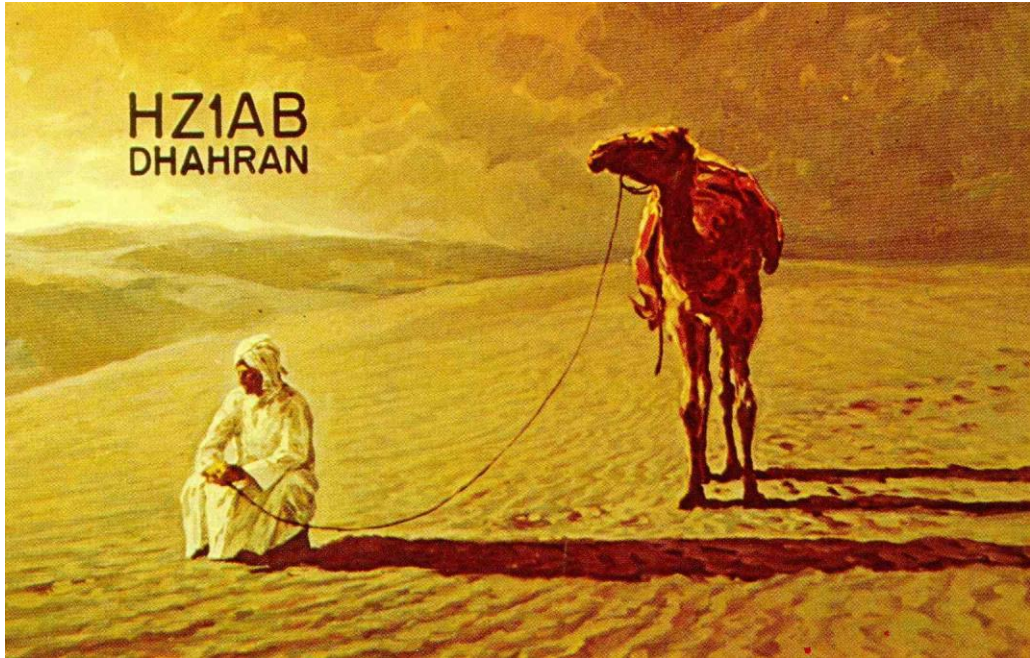
DHAHRAN AMATEUR RADIO CLUB

TO RADIO	DATE	UTC	R S T	2-WAY MODE	MHz
K5KG				SSB CW RTTY	14
				SSB CW RTTY	21
	12-1X-97	0114	469	SSB CW RTTY	7

QSL MANAGER **K8PYD** A W4MPY QSL G TNX QSL
73,



Cards used for direct mailing in late 70's early 80's




NASA Satellite-Photo QSL, arranged by Dave Earnest, K7JJ.

HZ1AB

Dhahran Amateur Radio Club
Kingdom of Saudi Arabia

QSL Manager
Leo Fry, K8PYD
5740, N. Meadows Blwd
Columbus, OH, 43229-4165
USA

ERICSSON 

TELECOMMUNICATIONS WORLD WIDE
Our business is to put people on speaking terms

QSLs Courtesy of Ericsson, through Thomas Carlsson, SM0CXU

Other Information:

K7JJ, Dave Earnest

Dave remembers:

My first experiences with ham radio were in Saudi Arabia at HZ1AB. As a result, this station and call are memorable to me. I became a ham while in Saudi Arabia in 1954. I also spent 9 years in Saudi Arabia, 1977-86, with the oil company and again had the opportunity to be involved with and to operate HZ1AB again. Some of my best ham memories and lasting ham friendships came because of this association....

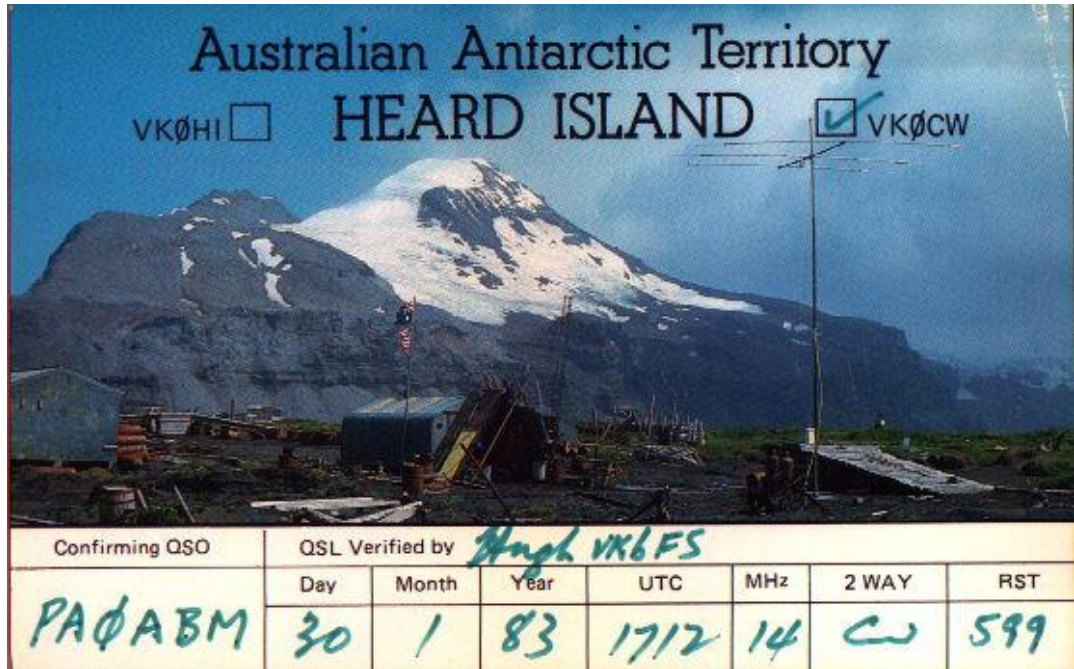
Dave is our Web Master and the trustee of AB1HZ, the HZ1AB ex - member's club. Read more at

<http://www.ncdxc.org/Ncdxc/Newsletter/Dxer1998/dxer0898.pdf> Page 7
and at www.qsl.net/hz1ab

W7SE, Walt Marshall

Walt was in Saudi 1978-93 and did participate in one of the first DX-peditions to Heard Island, bad weather and a questionable ship cut the trip short, and they had to return to Australia. The re-attempt was successful and another member of HZ1AB made that trip, WA8MOA Bob Welsh.

This is what PA0ABM, Wino writes about that trip on <http://www.qsl.net/pa0abm/>



The 1983 DX-Pedition to Heard Island

I never forget this Dxpedition to this remote area of the world. My friend Walt W7SE, was one of the Heard Island crew. Walt, who was an engineer of Aramco, was very active from Saudi Arabia, using the call HZ1AB. He did get the call **VK0SE**, to use on Heard Island. However, Walt never became active from Heard Island. The boat, the crew hired, did leave Perth for Heard Island, and found two times a big storm on its way. Two time the vessel did return to Perth, to reload fuel. After the second attempt, Walt did run out of spare days, and had to return to Saudi Arabia, back to his job there. He only can say, **I did carry the gear on the boat to Heard Island.**

In 1983, as you see on the QSL, I was lucky to get in the log. It was one of the last days, VK0CW was operating. Pileups were enormous. They where working split and I did not have a second VFO. A SWL friend of me, Cor, (now PA3FPB), living next door brought his receiver, so I could split. I heard the operator saying **up 61**. My guess 14.061, was the right one, as you can see on the QSL.

This 1983 trip to Heard Island is a story on itself, but the return trip from Heard Island back to Perth is even more unbelievable. Therefore, you must see the video... **The ship that should not have ...**

It did not surprise me, that the 1995 plan, to reactivate Heard-Island, was cancelled. The reason **the ship, the expeditioners did hire, was unable to sail....** This first attempt to reactivate Heard Island, did cost them a lot of money. New plans were made for another try in 1997... Finally, they succeeded.

Do you want to read more about this adventure? Then read the book VK0IR, Heard Island, ISBN 0-9626013-7-3, written by KK6EK. It tells the complete story.

The Frankford Radio Club Newsletter, June 2002, Page 4

Quote from the article "Search and Pounce Strategies", by Richard, K3IPK.

Before I start tuning down the band, I open my CW filter to WIDE (allows hearing more bandwidth), hit the "A=B" VFO button (see why below), and then start slowly tuning down... looking for CQers ONLY. If I hear the word TEST (as in the word of "HZ1AB HZ1AB TEST"), I will stop to listen for a moment. If someone starts answering the CQ, I will pop the frequency into a "quick memory", but immediately start tuning down again since I don't have the CQers callsign yet, and he is just starting a QSO. But if no one answers him, I will wait for him to call CQ again (typing in his call as he sends it and doing a 'check partial'). If I hear a busy pile-up or something else that may be of interest as I tune, I will pop that into a "quick memory" and check it out briefly after I get to the bottom of the band. Also, if I hear only a callsign as I am tuning, I will be typing it to "check partial" ... perhaps it is the end of "CQ TEST HZ1AB HZ1AB". If he starts a CQ again, all is ready.
For the complete article, go to, <http://www.gofrc.org/newsletter.shtml>, June 2002, page 4.

JUG, Northern California Contest Club

Quote from the article Andy's Dandies, by Andy, AE6Y
WPX is certainly a very democratic contest. There's no need to wait in a pileup for a rare country or zone, as the only thing that counts is the prefix (though you get more points for inter-continental QSOs). I tried calling HZ1AB once or twice on 15, then moved on to get same number of points from my very next contact, with SK3W in Sweden for a new prefix. Ironically, HZ1AB called me a few hours later. (*It was me that gave Andy that thrill - ed.*)
For the complete article, go to, <http://www.nccc.cc/newsletter.html>, June 2001, page 5.

Array of Light

Quote from the book, Array of Light, Chapter: Forward -3, by T. H. Shiller, N6BT, FORCE 12 Antennas and Systems. This Chapter describes the use of a Sterba Curtain antenna array.

The first curtain hooked up was 15 meters. It was already dark and may be about 9pm. The tribander was attached to the rig and the band was not very alive. Then we switched to the curtain. That moment will be in my memories forever. The difference between the two antennas was so dramatic that we were stunned. It was like walking into a dark room and then turning on the light. The band was quiet with the tribander, but alive with the curtain. There was only one station that was very loud, and it was HZ1AB. He was running European stations and had a large pile-up. We did not have an amplifier in line yet..., but we tried to call him anyway with 100 watts. I signed my call once, N6BT portable KH0. The next thing we heard was the operator, Peter, yelling over the air, "Hold it! Who was that?" I identified once again, and he proceeded to inform us that he had his beam to Europe, and we had just crashed right over everyone. He turned the antenna towards us, and we were pinning the needle of his rig.

The book Array of Light can be ordered at, <http://force12inc.com/> Reading it is recommended.

1959 – 1961 Time Frame. Important Phone Patch

Described in E-Mail from K4ZM, to various recipients

In 1959-1961 I was in the US Navy and stationed at NAS Norfolk, Va. I lived in the ham shack of W4NPT and ran many phone patches on 20-meter SSB for HZ1AB a US Air Force base in Saudi Arabia. Our SSB rig was a Central Electronics 20A with the Command Set VFO, an HQ-170 Receiver, a Johnson Viking Courier Linear Amplifier, and a Mosley TA-33 triband antenna.

One evening I received a phone call from the state department requesting that I run a phone patch for a high ranking official of the Saudi government who was in the US with his daughter who was having surgery. The night of the scheduled patch I established contact

with HZ1AB about 15 minutes before the schedule and checked out all the equipment. They were very strong into Norfolk at 2AM. When the call came from the state department, we were all ready and started the phone patch. About 5 minutes into the phone patch, I looked up to see that my Johnson Courier linear was on fire. Flames were coming out of the top of the cabinet. I stopped the phone patch and ran for a CO2 fire extinguisher to put out the fire. After I got the flames out, I removed the linear from the operating position and sat it on the floor behind me. I was really worried about botching the phone patch that the state department deemed so important. So, I connected the antenna directly to the output connector of the 20A and tuned it up. I called HZ1AB and asked how he copied, and he replied you seem to have the problem resolved because your 20db over S-9. We finished the phone patch in about 15 more minutes with no problems and after I had hung up with the state department, I told HZ1AB I was using the 20A barefoot and he could not believe it.

I was running QRP and enjoying it before it became fashionable.... Hi.

1985 – 1994 Time Span

Working HZ1AB While Mobile East Coast, by AI, W1AB

I've been working HF CW mobile for many years--from my pickup truck, vans, cars, and my Gold Wing motorcycle (QST, Jul 93, p 21). From about 1985 to 1994 I used a Ten-Tec Century 22 in my Toyota van, running about 25 watts output to an array of five monoband whips (each with its own feed line, with an antenna switch beside the rig). The five Ham Stick whips were mounted on a homebrew five-foot-long mag mount on the van roof, one behind the other along the length of the roof. It was a sight to behold. And it worked out very well. I could work VK long-path on 40 meters, and just about anything I heard, unless the pileup was homogenous.

I started counting countries as I worked them, being sure that I had a valid contact before counting each new country. I would work DX contests when I was on a trip, averaging about 30 contacts per hour (which included duping and logging by hand). I worked my way up to 160 countries before I got tired of keeping up with them and stopped counting.

One evening as I was headed home to Damascus, Maryland, driving up I-270 from the metro DC area, I was making a few contacts just for fun in the ARRL DX Contest. Tuning on up the band, I ran into a TRULY homogenous pileup. I soon learned that it was in honor of HZ1AB, whom I could copy very well. Even though there were obviously hundreds, and perhaps thousands, or stations calling, I joined the fray for about a half-dozen calls. Then I saw it was hopeless, so I just listened, wishing I could work HZ1AB for another new country.

The HZ1AB op suddenly said, "QRX TEN" and then went silent. The frequency went completely quiet, as the huddled masses waited to begin anew.

I looked at my digital wristwatch and timed off nine and a half minutes. Then I called, on an absolutely crystal clear, silent frequency, with the commanding voice of my 25 watts and a mobile whip, "HZ1AB DE K3KMO AR".

HZ1AB came right back to me, we made the exchange, and suddenly hundreds, if not thousands, of other signals roared back to life!

I was laughing out loud as I drove on up I-270. It's a wonder I wasn't stopped by a Montgomery County police officer on suspicion of severe drug abuse.

(I could go back and search through my logs if you want a date. That was truly one of my most memorable contacts ever, in 45 years of hamming.)

Keep in touch.

73, AI, W1AB

E-Mail from "Scottie" Richard S. Fisher regarding QSO with a mobile station.
See also "1952 - 54"

This is a partial quote from a mail from Scottie, time frames deviate. Same - same, but different: AM versus CW and some 30 years later.

..... My funniest experience which I never will forget is hearing a mobile station operating on 20 phone calling CQ. Of course, he was running 50 watts AM to a Johnson Viking mobile rig with an 807 in the final. He was about S9 for whatever reason, so I called him. There was a long silence and then he came back in a very shaky voice and said HZ1AB this is (I wish I knew his call) - are you really in Saudi Arabia????? I said yes and gave him his report. He said that I should NEVER call anyone like that again as he damn near wrecked his car when I called him!! He said he would never believe it till he saw a QSL card from me, so I told him he was a special case, and I would send him a card first and then he could send me one. So, I did and 3 weeks later I got a card back saying he still couldn't believe it, but he had a card to prove it and I guess I made one very happy camper in that contact. It was just great to do that and a lot of fun....

1994, Article in National Contest Journal (No. 3, May/June 1995) also translated to Swedish for the Swedish National Magazine, QTC No. 11/94

The C4C Excursion

By: Thomas Carlsson (SM0CXU) with Terry Posey (K4RX)



SM0CXU, Thomas. G4KIB/5B4YY, Jeff. K4RX, Terry
WAE-CW 1994 – All time high MS outside Europe.

The expedition (excursion) to Cyprus was born during the July monthly meeting at HZ1AB, the Dhahran Amateur Radio Club (DARC). It was during the peak of the summer heat (119°F/48°C), the middle of the summer propagation doldrums and at the onset of Cycle 22's through that our thoughts had once again turned to DX contesting.

Not wanting to wait until the fall contest season to arrive, Terry Posey (K4RX) and myself discussed the possibility of a WAEDC or WPX operation with Jeff Hambleton (G4KIB/5B4YY), who has a house and station in Cyprus. After an analysis of everyone's vacation schedules, contest dates, airline flights and consideration to Jeff's family, we finally decided on the WAEDC-CW. Logistics aside, the WPX seemed too far into the future to

satisfy our needs. Also, the WAEDC is a personal favorite of mine and CW is our general choice of mode.

A quick rundown of available equipment at 5B4YY indicated that antennas were needed for 40 and 80 meters as well as another transceiver for the multiplier station. Low band performance would be the key to success in the WAEDC due to its bonus multiplier scheme for 40 and 80 meters. Terry, who is our specialist on antennas at HZ1AB, wanted to go big and install W8JK phased arrays for 40 and 80 meters and a Beverage for receive. The toroid for the Beverage feed-point transformer was taken from the Junk-Box, but the 4-to-1 baluns for the W8JKs had to be ordered by phone for international courier delivery to arrive in time for the contest.

Ten days before departure, we learned that 1994 WAEDC rules were changed from the familiar 36 hours format back to the 48-hour format of bygone years. The contest would start 12 hours earlier and this meant that one night and a morning that were planned for final antenna adjustments and computer checkouts had suddenly disappeared.

Terry and I departed Saudi Arabia Thursday morning and we arrived at Pathos, Cyprus, Thursday evening where Jeff, his wife Nina and their teenagers Sara and Cyrus received us with great hospitality. The activities for the next day were planned over refreshments. With the discovery that Jeff had done extensive preparations, we were sure that all could be arranged in time.

Luckily, Jeff began his yearly vacation in Cyprus three weeks ahead of the contest and he volunteered to locate additional coax and wire needed for the new antennas and to do some of the installation preparations. It was planned, that upon the arrival of the rest of the group, we should together install the Beverage and measure and install the W8JKs' coaxial phasing lines and baluns that were brought with us. It turned out that Jeff single-handedly accomplished far more than imaginable – all wires were in the air awaiting feedlines and final tune-up.

Jeff's MFJ SWR Analyzer made short work of the remaining antenna tasks. With its indications for frequency, SWR and impedance, this magic box replaces the requirement for two operators, a transceiver, an SWR meter and two handy talkies to conduct antenna tests. The MFJ SWR Analyzer was used to verify proper phasing of each of the baluns and to cut each of the W8JK's quarter-wave phasing lines to exact 90 electrical lengths. After the coaxial connectors were soldered (the fun part of any antenna project) the four W8JK elements were again raised into the air and the dipoles were cut for lowest SWR. A final check of the homebrew Beverage 9-to-1 transformer confirmed broadband performance from 1,5 MHz to 60 MHz.

By late Friday afternoon before the contest, we had the following setup ready for action:

Transceiver – RUN	ICOM 735
Transceiver – MULT	ICOM 730
Audio filter	Timewave DSP9+
Linear	Collins 30L1, only first 24 Hours
Ant. Tuner	MFJ
Computers	2 ea 486 Laptops with K1EA CT 9.02
Antennas	Crush Craft A4S; 4 el. 3-band GAP Voyager, vertical 80, 40 & 20 m W8JK, 2 el. phased Dipoles for 40 m W8JK, 2 el. phased Dipoles for 80 m Beverage 120 m long
Ant. Instrument	MFJ SWR Analyzer

Add to the above equipment, that the exotic sign C4C that Jeff had managed to arrange and a can of Bug-Spray to keep the mosquitoes at bay during the night hours. The latter accessory would also be use on more than one occasion when Terry complained about the misuse of mechanical speed-keys. Unfortunately, the Spray was found to have little effect in this regard.

By sunset Friday, all was confirmed ready to go and it was decided to spend the remaining time until 03:00 local time (00:00 UTC) on relaxation and nourishment. We wined and dined till after midnight at a nearby restaurant that featured a very happy Cypriot folklore show. Many thanks to Jeff and his whole family for that wonderful evening. After a couple of hours of sleep, it was time to establish a frequency on 80 and commence...

The contest progressed well the first 24 hours with excellent success on 80, 40 and 20. The W8JK's and the Beverage yielded a commanding presence on 80 and 40, where multipliers have premium bonus value. Although the QSOs came easily, it was a bit difficult to process QTC messages early in the contest as there were few offers.

All was well until one hour into the second day when the linear would play no more – the transformer had suffered a melt-down. Our morale sagged as QSDs became terribly slow. Should we give up and make a tourist holiday instead? Cyprus is made for holidays! We decided to continue. Since we were operating keyboard CW with K1EA's CT, it was only to make additional use of the F1-key to make more and longer CQs.

As it happened, the loss of the amplifier had coincided with a temporary propagation fade. Good radio conditions eventually returned, and our QSO-rate improved to near amplifier-equipped levels. As an interesting comparison, we did 1565 QSOs during the first half of the contest with the linear and 905 QSOs during the second half without the linear. We were surprised to generate pileups on 80 and 40 meters while running only 100 watts; again, proof that the antennas performed well.

Our preliminary results:

2310 QSOs
2144 QTCs
480 Multipliers
Total: 2,137,920 points

Some comments from the contest:

- Due to the low sunspot count, poor propagation was experienced on the higher bands. Only approximately 100 QSOs on 28 mHz.
- Quite low activity from Europe. We had many QSOs with stations who reported serial numbers below 10. Of course, we are grateful for each of these important QSO points.
- We normally experienced good QTC traffic techniques where many operators copied the messages directly and others obviously made recordings.
- The multiplier station was not as useful as anticipated.

We refer to C4C operation as an excursion since we had few equipment transportation logistics to deal with. This contrasts with expeditions where all hardware from generators to antennas usually must be transported to the DX location.

Why do we do a trip like this when we have such a good setup and rare QTH as we have at HZ1AB? After several contest efforts, some of them very serious, we do realize that those who are located closer to a continental border have a significant contest advantage.

Furthermore, we have unusually high QRM and QRN levels a HZ1AB – especially during the summer months. Those who have called us in vain on 160, 80 and 40 might have realized our predicament.

The WAE is a very interesting contest with its unique QTC aspect.

Although C4C had plenty of takers, we never generated the huge pileups that we experienced from HZ1AB during the CQWW. But then we have the whole world calling not just Europe!

Thanks to all who provided QSO and QTC points.

The score later proved to be Non-Europe MS All Time High, a fact that the organizers totally failed to mention.

1998, HZ1AB Observations – CQWW-SSB 1998
Posting to [CQ-Contest] by Eric Scace, 27 Oct. 1998

Through good luck and a great deal of kindness & help from local hams, I was able to operate about 14 hours of WW Phone on Sunday from HZ1AB.
(Thanks, guys!) *(The good luck was me, SM0CXU, meeting Eric in Riyadh to give directions how to get there and kindness & help was Paul, G7SLP who helped Eric in Dhahran- ed.)*

Notes on the contest

Saturday: I must work. By the time I rent a car Saturday evening, it's too late to get to the station. At 5am Sunday I leave the hotel for the 450km drive to HZ1AB. By 10:30am I've cleared security and been escorted to the station.

0730z 10m QSO#210:

Other operators worked 20m and 40m yesterday. I start on 10m, figuring to pick up lots of 3-point Europeans and many multipliers on an un-used band. Spend 10 minutes S&P to see if any unusual multipliers can be easily found. But it is slow to break pileups one by one, and none of the multipliers are particularly rare. Call CQ: lots of Europe, Africa, central/northern Asia... nice rates... good signals... a conventional 10m opening time to bulk up the log with 3-point QSOs. No point in searching harder for multipliers - there's almost nothing to multiply yet! Add 100 QSOs to the log here.

0815z 15m QSO#318:

And the 15m log is empty too. Take time to add QSOs on this virgin band. Too early for the US. I'm surprised at the number of Indonesian stations active: dozens (unlike the "few" that I hear from a US east coast location). Old east coast habits intrude I get a little thrill when a YB calls and says, "Zone 28", even after the 25th one. After 200 QSOs with steady rates, I become increasingly uneasy about neglecting 10m for so long. The time to build up QSO volume is limited on 10m. Openings can be short to new multipliers.

0930z 10m QSO#530:

Rates are slower: another 70 Qs in 30 minutes. At 10z my chaperon must go to work. This is a military base and I'm not allowed to remain at the station unsupervised. A new chaperon will be available in 3 hours. I leave the base for lunch at a hotel and nap on the lobby sofa, with an issue of "QEX" open on my lap to an article on DSP transceivers (a.k.a. Kachina).

1330z 10m QSO#602:

Back in the shack. Propagation is great for 10m: some Caribbean multipliers are already around as daylight works its way northwest across zones 7 & 8 towards North America.

YBs, 9M8R, and K9AW/DU6 call in: wow! It's 3 hours after sunset there, and they can still work on 10m! Then KC1XX calls at 1338! WOW! 10m opening to the USA! Seven minutes later I realize the radio powered up on 15m, not 10. Taking that nap was apparently not a good idea: still fog-brained. Fix the log, change bands to the real 10m, feel stupid.

1345z 10m (really!) QSO#641:

Opened to North America already, with K4LM calling at 1358z. But no other North Americans call until VE1YX at 1438z. I was initially very surprised to start with someone that far north... until I looked more carefully at the map. The entire east coast, from Florida through Nova Scotia, has the same beam heading to/from HZ: 46 degrees/314 degrees. If the North Atlantic will open for 28 MHz to HZ, then probably everyone along the coastline will be able to work us, with the Canadian Maritime provinces at the near end. N4TO, WB4OSN, VY2SS, K1ZM, and WA4MSU all showed up in the next 15 minutes. And that was it for North America! The band shuts down in that direction (over Europe) quickly... by 1500z I couldn't even work Europeans anymore. No big packet-cluster driven pileup from the USA. It really reinforced the lesson of how short 10m openings can be to some parts of the world! I have no idea where the US multi-multis were during those 15 minutes... Local sunset occurred just a few minutes after 15z. I hunted around for the rest of the South American and African multipliers.... and ran out by 1530z. No worry: 15m should still be working.

15m 1530z QSO#822:

Wrong! Worked C56T at 1538 and that was it. No Europe. No US. Boy, when the sun sets, the bands close and they close quickly! I really had expected a lingering F-layer ionization over SE Europe to have kept 15m open a bit longer. This leaves the log heavy with 110 more QSOs on 10m than on 15m... and disproportionately light on 15m multipliers: 74 on 15m (one for every 3.4 QSOs) but 92 on 10m (one for every 3.9 QSOs). Too late to do anything about it now... and it was worth the risk: great to have picked up North American multipliers on 10m.

20m 1540z QSO#823:

The expected European pileup. A few USA west coast weak but calling in on the long path: a cool opening that worked until at least 1630z and which I remember learning about at YK0A. But it never opened further east than zone 3. And no one on US east coast is calling me, even though it is Sunday morning, and I should be fresh meat. Run Europeans and western Asia, with the occasional JA. In 45 minutes, European signals get very weak... and the band then closes to Europe. Wow - very sudden & distressing. The QSO total here is less than on 10m and 15m! But it's good motivation to get on 40m: totals are low on that band too and now it is dark from Europe across Asia.

40m 1630z QSO#926:

VR2HK is first QSO on the band - easy double multiplier! Run Europeans and the occasional Asian.

80m 1745z QSO#1029:

No QSOs on this band to date. Call hard to work OK2RZ; can't work anyone else... even loud S5's and IT9's ignore me. Conclude that the antenna is ineffective. Paul G7SLP, my chaperon and logging companion, rigs an 80m inverted L in the dark between two towers. 45 minutes later running Europe and west Asia at a modest rate but everything is a multiplier. No real propagation surprises. Run out of multipliers and quit the band as the rate isn't fast enough to justify staying longer.

40m 1855z QSO#1052:

Slow slog. Keep nodding off in front of the radio (and Paul) – very embarrassing. Step out for fresh air. Chug along.

80m 1940z QSO#1088:

Back for more mults, knowing that this band will finish very short on QSOs relative to the others. Rate is higher than last time on this band and signals from western Europe are louder as D-layer evaporates. Try 160m at 0z but can't raise anyone on the 80m antenna. No 160m antennas.

40m 2100z QSO#1161:

One more time. Maybe US will open early. Nope... very slow for a half-hour. Give up. Not enthused about beating my head against the wall on 80m either. Check 20m for any fluky after-midnight openings.

20m 2130z QSO#1171:

Work CU3DJ. Find a few South Americans, some Caribbean mults: fortunately, it is Sunday so the big guns have worked down their raging North American pileups of Saturday afternoon and there are little gaps when I can be heard. Surprised to work N4TO and W4AN. Maybe should check out 15m?

15m 2200z QSO#1182: Was a nice idea, but... Work CP8XA and CP6AA for multipliers. Nothing else. Don't really want to beat my head against the wall on 40m again. Back to 20m.

20m 2210z QSO#1184: Call CQ. Some Europeans... then W4MYA, K3LR (dupe), W9RE (dupe), K2TR, W4AB, W3BGN (dupe)... Nice to hear the US, but strange: North America is Very Loud. Then the packet-cluster hurricane begins. Rate meter goes up as far as 500. Now I remember: This is the "agony opening" from the US end. 46 hours into the contest, and suddenly a new multiplier shows up from the night side of the globe on 20m. Huge pileups form on the few rare stations: do you keep trying to break through? Check back later, hoping that the pileup is smaller, the multiplier is still there, and propagation is improving?

There are a few Europeans, but probably most Europeans are on the lower bands. The real signal strength is to the Americas. And the Australians also show up at their sunrise long path opening to the east coast of North America, and work me along the way, too. It stops abruptly: at 2357z I worked 8 US stations in that minute. At 2358z I work only OL7W. Nothing after that. Was fun!

40m 2300z QSO#1333: Run Europeans and some North Americans on 40m till the end. Then Paul and I step outside: it's 3AM. Everything is quiet on the base. The moon set already but I admire the antennas in the starlight. We shake hands and drive off. I retrieve my passport from the guard office and start west across the desert towards Riyadh. Twilight forms in the rear-view mirror. Home is far away, but the contest has made my radio friends seem nearer.

Totals:

Band	QSO	Zone	Cty
160	0	0	0
80	96	10	35
40	296	16	63
20	388	28	84
15	254	19	57
10	361	20	72
Total	1,394	93	311
Score	1,576,408		

I'm real curious about this late night 20m opening. Why does the band close for almost 5 hours, and then re-open at 2 AM? Why are US signals so much louder during this opening,

compared to the "normal" full-daylight path? Europeans are a lot weaker currently. I suspect there is some interesting ray geometry occurring currently. Has anyone investigated this?

-- Eric R3/K3NA

1994 – 1998, The 7Z500 Story

Aug. 1985 – June 1987 QRT

By permission of K3UOC, Mike Manafo

Contesting in Saudi Arabia

by Mike Manafo

K3UOC/7Z500

This article originally appeared in the December 1997 issue of CQ Contest. The article has been updated and additional photos have been added to the text.

It's a wild fantasy. A chance to live, work and operate from an exotic locale . . . one of just a few stations in the country . . . a unique prefix . . . your station at a royal palace. Every now and then I kind of shake my head and laugh a bit--these are my actual operating conditions at 7Z500. For three years now I have been fortunate enough to work some great pileups--in and out of contests--from here in the Kingdom of Saudi Arabia.



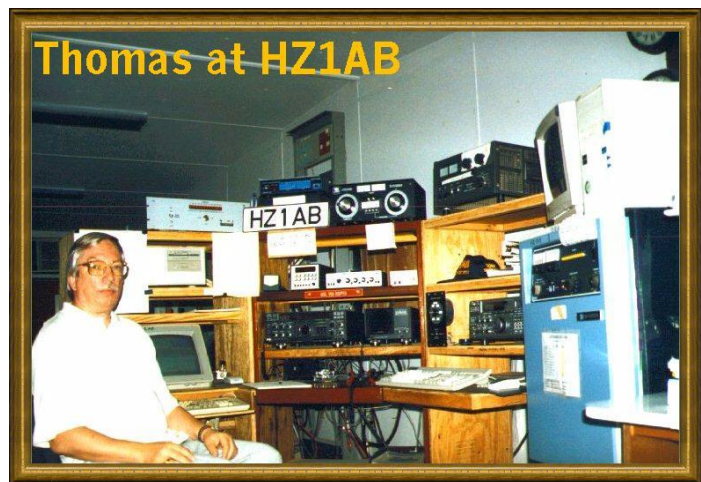
All fantasy aside, this has been a very interesting overseas assignment and I have taken the opportunity (on numerous occasions) to polish my contesting skills while giving out a valuable multiplier to the contest-deserving. DX-wise, HZ tends to be needed only on the more difficult bands. Contest-wise, HZ is always in top demand. For years before I ever imagined I would operate from Saudi Arabia, I remember what a thrill it

was to work HZ1AB and HZ1HZ in the big international contests. And those pileups they had . . . monumental!

My wife and I came to Riyadh in August 1994 and will be leaving in June 1998. I can't talk about the particulars of our assignment here other than to say that we work for the Saudi Royal Family. Through the benevolence of my sponsor, a ranking Saudi Prince, 7Z500 came into being in October 1994 with full amateur privileges bestowed by the Saudi PTT. In a country with no amateur radio infrastructure and only a handful (a small handful) of sanctioned operations, I often count my blessings that I can get on the air at all. The whole story behind 7Z500--or what I can tell of it--can be found in my article "FAQ 7Z500 - Amateur Radio in Saudi Arabia."

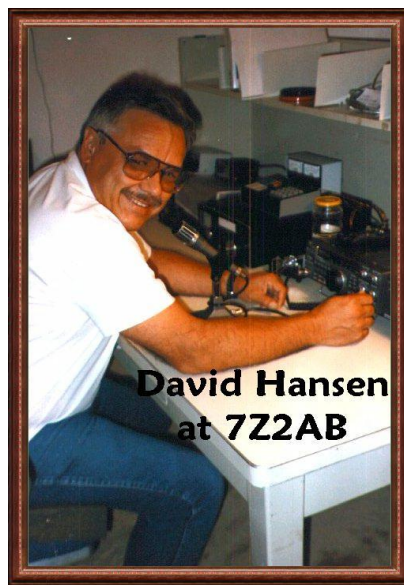
Now let's talk contesting. Over the years there actually has been a fair amount of contest activity coming from Saudi Arabia. HZ1HZ, Ahmed Zaidan, is a legendary presence in the major international competitions.

These days, Ahmed seems to favor the CQWW and the ARRL DX. Ahmed is partial to CW and has been a contester longer than most of us have been alive. He is located over in Jeddah on the Red Sea and people comment year after year how loud he is, especially on 10 and 15 meters. During the 80's and the early 90's, HZ1AB over in the Eastern Provinces was a force to contend with in the contesting world. Since losing their big rhombic in 1994, large-scale contesting has slacked off considerably from that station. However, during their 50th anniversary year, HZ1AB is bouncing back, and I hear rumors of the rhombic going up again. Thomas Carlsson (SMOCXU), a long-time HZ ex-patriate, manages to keep the HZ1AB contest flame burning by participating (as his time allows) in the CQWW, the WPX and the WAE contests.



Thomas Carlsson (SMOCXU), a long-time HZ ex-patriate, manages to keep the HZ1AB contest flame burning by participating (as his time allows) in the CQWW, the WPX and the WAE contests.

In the early 90's, 7Z2AB at the American Consulate in Jeddah turned in some big scores both single and multi-operator. Unfortunately, 7Z2AB was forced to shut down operation in 1993. 7Z1AB (our club station at the US Embassy, Riyadh) also turned in some respectable scores several years back. However today, contesting is pretty much on-hold at 7Z1AB due to increased security at the embassy and lack of access to our station there. We have three HF positions at 7Z1AB and an array of antennas on the roof--now all we need is weekend access. So, considering this situation, over the past three years I have had a rather unique "window" for contesting from 7Z500--little competition and very high demand.



My first HZ contest was the 1994 CQWW SSB. Having just arrived in Riyadh the previous month (and only several days prior receiving the 7Z500 license) I was unprepared for this contest. I guess my radio-mind was still in a South American/Caribbean time warp because what I expected were deep US pileups and good EU runs. What I found were deep EU pileups and **long** JA runs. And not one NA station heard. I doubt if my little R-7 vertical was heard stateside either. To me, this was a whole new brand of contesting. Local propagation was still much a mystery; I had a whole new audience; I was further from the big ham population centers than I had ever been before; I was

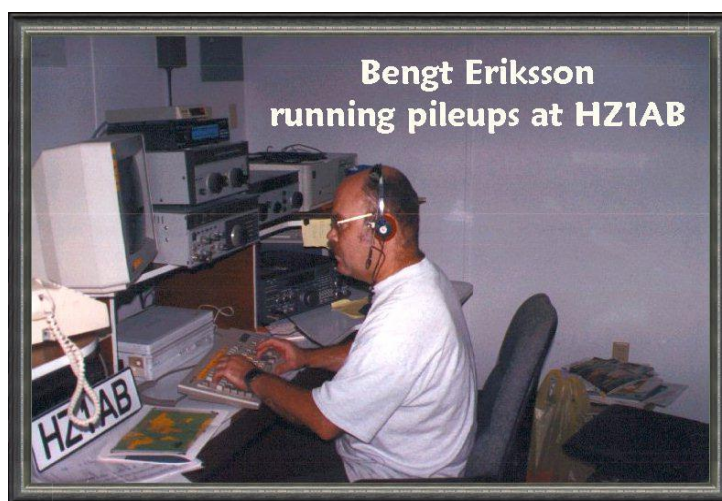
running average power into a non-competitive antenna system. And then I checked my score and realized that all those JA contacts were just one-pointers! At that moment I experienced one of those "location is everything" epiphanies. I decided that if HZ was less than an ideal location, then I had better learn propagation, get some power, get some gain, and become a smarter contest operator. And to maximize whatever contest tools I had-- concentrate on CW rather than SSB.

So anyway, now I'm pretty used to contesting from an area that few big guns ever swing their beams toward. Oddly enough, propagation for us on the Arabian Peninsula can be very similar to that experienced by the southern Europeans. Therefore, our real competition on the peninsula is not each other, but the big guns from southern and central Europe. That being the case, my usual contest strategy is to stake out a run frequency and establish a presence by virtue of my multiplier status. If nothing else, this certainly is a lot less painful than butting heads with Europeans (and generally losing) while in S&P mode. Once that presence has been established and the packet spots kick in, contesting from HZ can be very sweet indeed. When those runs die down, I switch to S&P mode and do the best I can.

Of course, the contest itself dictates specific contest strategy. In the regional or national contests, S&P pays off and can be real fun for everyone as well. In contests such as the ARI or the CQ-M, when runs are mighty slim for the national competitors, I enjoy dropping that "7Z500" in reply to a "CQ test". Oftentimes, you can sense the excitement on the other end. And as my pal Fred Laun is fond of saying, "Contesting is, and should be, primarily fun." Of course, there are times during a major contest when I (and probably you too) question how much fun we're having. But in the end, I like to think it all averages out.

So, what makes contesting from HZ a unique experience? First, as you probably know, our weekend in the Islamic world is Thursday and Friday. Saturday is our Monday so most of us must be very creative about contest participation. Since my station is set up where I work, I have become adept at bouncing back and forth between work-contest-work-contest. My off-times are generally high compared with other serious competitors, but I do my best to make up for lost time when I am in contest-mode.

As a second unique item, except for HZ1HZ, the rest of us must commute to our stations. I live 20 minutes away from the royal palace, Thomas lives four hours from HZ1AB, and of course we all must travel to the US Embassy when we work from there. On top of that, "access" can be a problem. At 7Z500, I need to obtain permission to pull an all-nighter at the palace. And because of extremely tight security now in Saudi Arabia, getting into the Embassy or into the USMTM station for a contest is very difficult. These are the kind of constraints we have come to accept and, speaking for myself, I am very thankful to be on the air at all. I think Thomas would concur with that sentiment.

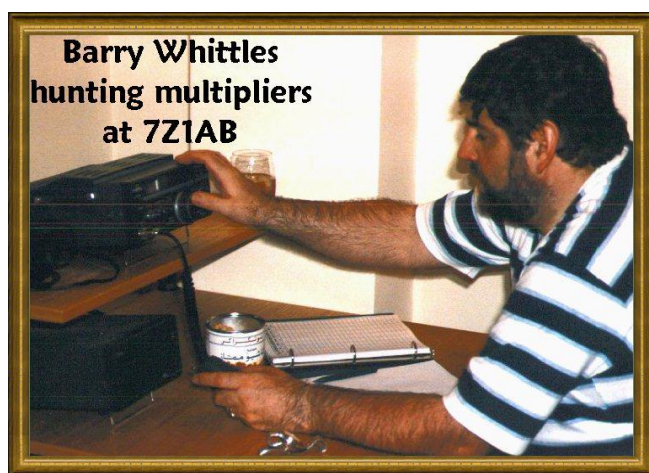


**Bengt Eriksson
running pileups at HZ1AB**

Something totally unique to my situation is the call sign itself--7Z500. If you were rolling along in a contest, running a nice pile-up, could you copy that call at 35 WPM, one shot? In the heat of battle, many can not. There are just so few calls that start with the number 7. Follow that with a similar sounding character (Z), dump in a five-dit number, and you've got

a sure-fire recipe for confusion. The saving grace of this wacked-out call sign is the "OO". How many times have I heard "OO"? It gets tiresome, but those double O's sure get my foot in the door in a pileup. I can only hope that "7Z5OO" ends up correctly copied in most logs. And for general information, ZZ5OO does not exist. My apologies to the PY bureau for any cards sent for this phantom station.

I'll save the litany of contests I have worked or plan to work. I don't think you are into laundry lists any more than I am. Suffice to say, I am a CW-guy, so if there's a good one going on, I do my best to show up, serious or otherwise. Equipment is not all that fascinating either. I crank out a KW or so to either an A-3S+40 (fixed on EU & NA), several inverted vees, or an R-7000. The interesting thing about gear in HZ is how it plays out there in the desert. Climatic conditions on the Arabian Peninsula are some of the harshest in the world.



With the sun beating down and the absence of any humidity for most of the year, antennas, coax, baluns, tie-offs, and the like are brutalized and scorched in a short period of time. Several years ago, I replaced a plastic enclosed balun that literally disintegrated into powder in my hand. My poor R-7 lasted one year. The R-7000 has survived two years and I am keeping my fingers crossed for three. If the heat isn't enough, we are plagued by high winds, sandstorms, and a super-charged electrical atmosphere for several months of the year. Did I mention the torrential rains and hail in

February and March? And I can tell you from experience, radios hate lightning surges. It's a real chore to stay ahead of Mother Nature in the desert.

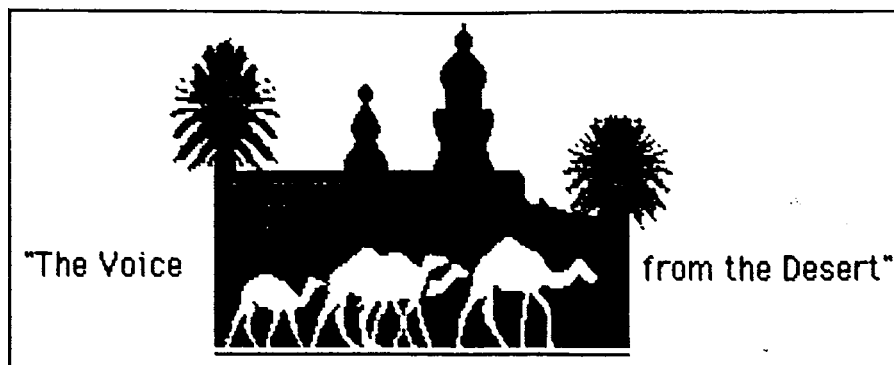
The ARRL DX Contest (one of my all-time favorites) is difficult to work from HZ. It's just the wrong time of the year for us. The skies are generally threatening; lightning can come up on a moment's notice and the static in the air is palpable. So, 7Z5OO is not much of a threat in the ARRL, I'm afraid. The occasional runs I can generate in this contest are exciting for everyone, however. I work as fast as I can while keeping one ear attuned for thunder and lightning outside. Who said there's no adventure left in radio?

Contesting and operating in general from HZ has been a real learning experience for me. On the other hand, it shares much in common with operating from almost anywhere. We all enjoy a good pile-up; a "new" one is always a kick; you've got to answer the QSLs regardless of how much it cuts into your operating time. There are a good number of universals out there for those of us who play radio. So, for me, this has been an exercise in learning to cope with some new conditions as well as to improve upon on some of those things that I seem to have been doing forever. I thought I might close here with some of my new-found knowledge--several things that I've learned about amateur radio and contesting since coming to HZ some 3+ years ago. Here goes:

1. As I mentioned before, location is very important. I was spoiled from all those YV and PJ operations into thinking that the NA contacts would always be there. In fact, a NA pileup from HZ is cause for celebration--on both ends. I have learned that if one factor is pretty much beyond your control, then you had best maximize the existing tools you have to work with.

2. QSLs are a real killer. Not so much the direct stuff, but the bureau stuff. Granted, lots of people still need that HZ confirmation, but I am seeing more and more "dumping" via the bureau (especially for contests) where the operator doesn't really know he is even sending a card specifically to you and probably could care less if he receives your card (although he has no qualms in asking for it). I have always been a faithful QSLer and now that we are back in the USA, I am finally catching up on this huge backlog of 7Z5OO bureau requests. The QSL route for 7Z5OO, PJ5AA and all my past operations is via W1AF.

3. What is here today can very easily be gone tomorrow. Given the tense political situation and the excruciating level of security in Saudi Arabia, there is nothing that guarantees the future of amateur radio in HZ--no national organization, no IARU membership, no bureaucratic infrastructure. The next international incident or terrorist strike could easily kill amateur radio for good in HZ. We just keep our fingers crossed and move ahead. I run a tight, clean operation and like to think that what I do puts Saudi amateur radio in a good light. We all do what we can. See you in the pileups, ***"Inshallah"***.



LONG PATH HZ1AB

NEWSLETTER OF THE DHAHRAN AMATEUR RADIO CLUB
REVIEW Covering the Period June 1980 to Sep 2004

By Thomas Carlsson, SM0CXU/AB5CQ, Oct 2004

No records from 1946 – 1979, during the 60's and 70's the club's name was Dhahran Experimental Radio Association (DERA).

09 June 1980

First meeting of the Dhahran Amateur Radio Club (DARC). By-Laws accepted and officers elected.

01 Dec 1982

40m antenna and KT-34XA was set up and used for CQWW both SSB and CW
Bob Walsh's night operations on 160m, probably a first from HZ, he worked W/WV and JA.
Bob Walsh and Walt Marshall will leave late Dec to join expedition to Heard Island, VK0JS.
Author's Note: First trip to Heard is abandoned, Walt returned but Bob stayed and joined the 2nd successful trial.

07 Mar 1983

Walt had made QSO with Bob on way back from Heard Is.
The Colvin's, Lloyd, W6KG and Iris, W6QL visited and did the ARRL-CW Contest 140,000 points.

07 Apr 1983

FT 902 DM Transceiver and RF 103 amplifier installed. K8PYD, Leo mentioned as QSL manager.

21 Jan 1984

The hosts will move within 1st quarter of 1984, no room provided for the club, meetings would follow to coordinate with the hosts.

Brief history of the club including a copy of a HZ1AB QSL to W3BYF, CW, 569, 13:00 GMT, 05 Feb 1947, 14 Mc. PA 2x813, Vertical Antenna, RX Super Pro, probably Hammarlund.

1. HZ1AB Established by U. S. Army Signal Corps 1947
2. HZ1AB has been continuously active since 1947. Operated by USAF MARS under callsign AJ4AB and later in the U. S. Army MARS program.

3. May-June 1980 Dhahran Amateur Radio Club (DARC) was formed to formalize the relationship between the non-military operators of the station and the USAC commander.
4. 1980-83. HZ1AB makes more than 100,000 2-way HF radio contacts in over 100 countries.
5. 1980-83. Upgrade activities
 - a) 220 VAC mains
 - b) Damaged tower replaced by Rohn 25-G
 - c) 3 el 14, 21, 28 Mc beam KT34XA
 - d) 7 Mc Yagi
 - e) RTTY capability
 - f) FT 902 DM Transceiver
 - g) Nov. 1983 operating AMSAT OSCAR 10, satellite
 - h) Rhombic antenna fixed

26 Jan 1984

Nothing new on the move to new location

25 Jan, visit by Ahmed Zaidan, HZ1HZ, dinner/reception at Sue and Allen Chisholm, about 40 members and guests attended, Ahmed also made a tour to the station.

05 Mar 1984

All time DXCC, mixed, 304 countries

During this period, meeting every second week.

07 Apr 1984

Shack is now secured at the new site.

02 Apr 1984

DXCC now at 305 with receipt of VU7 - Laccadives. An extremely rare country now (2004).

01 Sep 1984

First announcement for VE conducted FCC Amateur Radio exam session March 1985.

24 Oct 1984

Guidelines for "Award of Life Honorary Membership in the DARC"

- Made unique or significant contributions to the DARC
- Active members are ineligible
- Except for Active members, any individual may be eligible for consideration.
- No need to hold or have held an amateur radio license.
- No time constraint shall be applied to the candidacy
- Mere physical presence in Dhahran or HZ1AB shall not constitute qualification.
- Former operators of HZ1AB may be considered; station operation only, shall not qualify.
- Shall not be granted in expectation of, or hope for, individual gain or action beneficial to HZ1AB or the DARC.
- Cosmetic or frivolous awards shall be avoided.
- Shall be nominated by a member to the President and voted by simple majority of members present at an ordinary meeting.

11 Nov 1984

By-Law revision to change election of officers from June to December as most members out of Kingdom during summer.

03 Dec 1984

K8PYD, Leo Fry and K0JJ, Jerry Johnson awarded Life Honorary Membership

14 Feb 1985

Dismantling of antennas and towers for move to the new place commences.

Oct 1985

First issue of the Newsletter under the name "Long Path".

HZ1AB now QRT, the new location not yet given.

Sep 1986

23 Sep 1986, HZ1AB returns on the air. Yaesu FT 902 feeding a 160 - 10m Butternut vertical mounted on the 2nd floor roof.

Author's note: This is the location where I started my membership, we had 2 rooms, kitchen with hotplate, fridge, Microwave and sink bathroom with shower, luxury set-up for contest. This was next-door to the PABX room.

Jul 1987

Station set-up: KT 34 XA @ 60' (18m) tower, 40m beam @ 40' (12m) tower, dipoles for 160, 80 and 40m between the towers. 2 x Yaesu FT 902 plus linears.

Sep 1987

Assembly of the Log Periodic is well on the way,

Nov 1987

Log Periodic in the air 13 Nov, in time for CQWW-CW. Terry Posey and Brion Gilbert put up phased 80m dipoles (probably a W8JK, similar as used at C4C 1994 WAE-CW)

10 April 1988

Now the newsletter "Long Path" has got the camel logo. First time the Beverage antenna is mentioned.

29 Mar 1989

Kenwood TS 940S with 500 Hz CW filters added to the inventory.

14 Aug 1990

Last meeting at the shack. Remember, Gulf War started 02 Aug 1990 with the invasion of Kuwait. Following meetings held at homes of members.

12 Jul 1991

Meeting held at our ordinary shack.

The Kenwood TS 940S is now connected to a Ten-Tec Titan linear.

Rhombic antenna design and data (installation of the poles remains):

- Length 850' (259m)
- Width 285' (87m)
- Height 82' (25m)
- Optimal frequency 14.000 MHz
- Gain at 14,000 MHz 19.15 dBd
- Optimum Takeoff angle 12.4 deg.
- 3 dB Horiz. Beamwidth 15.2 deg.
- Half Apex Angle 18.5 deg.

MHz	Gain (dBd)	Take Off angle	Horiz. Beam/W	Rad. Res. (ohm)
7.125	13.54	24.9	43.5	478.4
10.125	16.78	17.2	27.6	562.7
14.200	19.28	12.2	14.8	643.9

18.400	20.30	9.4	7.8	706.1
21.200	20.12	8.1	5.2	740.1
24.940	18.74	6.9	3.9	779.1
28.500	15.95	6.0	4.7	811.1

The Beverage must be restored after being destroyed by the MASH unit that resided on "our" antenna field during the crisis.

07 Sep 1991

John DeHart announced US Amateur License examinations at Brion Gilbert house, that's where the author got his general class license. At next session upgrade to Extra was done which gave me the nice call AB5CQ.

Lined up following antenna plans

Raise the tower from 60' (18m) to 120' (36m) and plant the corner poles for the Rhombic.

13 Nov 1991

Rhombic antenna wires installed

Antenna tower will go up next weekend.

07 Jan 1992

Rhombic and the new tower with KT 34 XA, 18 and 24 Mc beams works fine, however, the rotor can not do the job, riggers will be hired to change it.

07 Jul 1992

Joe Mitchell nominated John DeHart for Life Honorary Member, was that ever passed?

02 Feb 1993

Rotor not functional since some time an Orion rotor is ordered and will be installed Feb. 5th.

03 May 1993

Rick Kuter nominated Brion Gilbert for Life Membership; motion was carried. Was this ever executed?

Period 1992 to mid 1994 was very contest-active: WPX, CQWW and ARRL both SSB and CW. Unfortunately, no meetings protocols for 1994 in my collection.

Aug 1994 K4RX Terry and SM0CXU, Thomas visited G4KIB/5B4YY, Jeff and with the special call C4C they operated WAE-CW MS class, although we burnt the linear halfway through the contest, we scored non-Europe all-time high score.

05 Dec 1994

Due to new housing construction the Rhombic is out of working order say the minutes. CQWW-CW 1994 was the last time it was seriously used at a Multi Op Single Transmitter effort by K4RX ex N4KT Terry, SM5CCT Bengt, SM0CXU Thomas. 1st Asia and 4th world. The Run station was at the old location with KT34 XA, Rhombic, loop for 80 and sloper for 160. The multiplier station up the field at the new shack with the newly erected Log Periodic and some dipoles for low bands. Thomas provided a 600 m run of telephone cable and modems to connect the logging computers.

Feb 1995

K4RX ex N4KT, Terry long time member leaves end Feb.

Tower is now taken down.

Joe Mitchell returned on short new assignment.

Approx. 1993 to 1995 all meetings started with a breakfast-session at the Mission Inn whereafter the deserving proceeded to the shack.

05 Aug 1995

Carl reported on V. Admiral Scott Redd, K0DQ/ A92Q visit to HZ1AB

Dave reported having met Terry Posey and Joe Mitchell together with Thomas Carlsson at vacation back in the US. Dave and I did Ham Radio Outlet in Orlando and visited Mr. Sommer in Geneva, FL to look at the Sommer antennas.

Carl will leave end December.

Ken West decided to meet HZ1TA in Riyadh.

25 Mar 1996

All equipment has now been moved out of the old location, which will be torn down to give place for new building.

Station in operation at the new location with the Log Periodic and a ground mounted tower section as 40m vertical that stands on three glass bottles with bottoms up.

April 1997

Dave, K7JJ is setting up a HZ1AB web site

Tower still down

Access to the club premises is now impossible; Vic Gendron working at location maintains our presence.

September 1997

Entry possible but entry procedures not 100% established.

May 1998

No access to the station. August opened again

Feb 1999

G7SLP, Paul was officially apprised for his "above and beyond the call of duty contribution to the antenna farm".

SM0CXU, Thomas announced that he would donate a Force12-5BA multi band beam to the club. However, contributions are appreciated.

It was proposed to merge the Escrow Account into the normal cashbox, the meeting approved it, and cash will be needed to get the beam onto the tower.

May 1999

Our ex. President K3DTU, Dave Shepard had passed away and was honored with a silent minute.

Oct 1999

The club had contributed to make it possible having our long time QSL manager to visit us, Leo participated in the CQ-RTTY contest during his stay, a combined farewell party at Paul and Delia with Leo as guest of honor was an appreciated event.

Apr 2000

Ron Holtane who left end 1999 after 17 years' membership (may be longer) was proposed for Honorary Life Membership, approved, certificate is issued and sent.

Georg Schmidt, DK3QJ/JY9QJ was visiting the club.

May 2000

Riku, OH2RK (ex. OH2LWO) had written an article about HZ1AB in the Finnish ham magazine will provide translation.

July 2000

Dave Kaiser, AL7HG, ex-member visited. Jeff Hambleton, G4KIB reported to be operating from Sudan, ST0P.

Aug 2000

Ken reported that the Kingdom had sent up 2 ham-satellites SaudiSat 1 and 2. Thorough cleaning at Sep. meeting.

Oct 2000

Carl, V. Pres. and Kathy, Secretary leaving the Kingdom beginning 2001 after 14 years for new posting in UAE.

Nov. 2000

New rumors that we must de-mobilize, alternatives discussed.

Jan 2001

Carl and Kathy presented Awards of appreciation before their departure to UAE.

Feb 2001

Jon Ainge, G4LGZ visited, will be a member

Apr 2001

Nothing to report

May 2001

New members: WD6CVB/7Z1AB, Leo Bourne from the US Embassy in Riyadh and KA8GVS, Steve Shemensi who's XYL also joined as visitor.

Manfred and Thomas had met 9K2ZZ, Bob Furtzer from Kuwait in Riyadh, Bob is the man behind the Logger and Zakanaka software. Manfred and Thomas will go to Dayton, and it was decided that an Award of Appreciation should be presented to K8PYD, Leo.

June 2001

Thomas and Manfred reported from Dayton where they had regards from: KS6EZ/John Clausing, K4RX/Terry Posey, KC4AA/Bill Mills, K4AW/Joe Mitchell, W7FLE/Ron Holtane, W8UD/Dave Nygren, NT4TT/Ed Campbell, G4FTC/David Sparvell, K8PYD/Leo Fry and OH2RK ex OH2LWU Riku Kalinen.

Aug 2001

Thomas provided HZ1AB free QSL cards from Ericsson.

Sep 2001

Nothing to report

Oct 2001

Decided that incumbent officers are elected for 2002. V. Pres Bill Roussell leaves, Steve Shemensi is the successor.

Feb 2002

Nothing to report

Mar 2002

Manfred and Thomas arrived previous day, Thursday and stayed over night at the shack to operate Top band and other lower bands. Good show.

Apr 2002

TA1I, Emre Somcag welcomed to the club and G4LGZ, Jon Ainge leaves.

July 2002

Clamps for the 5 x 1/2" heliaxes need to be re-done, old clamps have rotted in the sun.

Aug 2002

The Brummets will be back, Bill Roig, AC4BD attended.

Sep 2002

Nothing to report

Oct 2002

The rotten door to the shack was repaired. The committee proposed the incumbent officers for 2003, they all accepted

Nov 2002

Main's power was found to be cut-off, Generator was started and successfully used. Much later it was found that the cable from the SCECO transformer was cut due to heavy rain. Thomas did CQWW-CW SOSB 15m with generator power.

Nov 2002

Generator maintenance

Jan 2003

MARS activity was prepared, station always prepared for MARS operation when we leave the shack.

Mar 2003

Thomas reported from his 2002 WPX CW SOSB 15m results, 2nd world, 1st Asia and all-time high zone 21. 2,272 Q, 659 Mult, 3,667,994 Points.

Apr 2003

Nothing to report

May 2003

Thomas reported Email contact with KE5TS, Ken Riley that was HZ1AB operator in the 1947/48-time span, may be the first one!

Jun 2003

Now, the mains power is restored, we have not had it since Nov 2002, and we do not need to crank up the generator anymore.

Jul 2003

Nothing to report

Sep 2003

Steve and xyl Yolly, given thanks for Award/Diploma/Picture scanning work that they started.

Nov 2003

Leo Bourne, WD6CVB left on exit only. Manfred reporting about CITC (Communication and IT Commission) Ham radio licensing in Saudi.

Dec 2003

Nothing to report

Jan 2004

Logging PC upgraded

Mar 2004

Nothing to report

May 2004

Manfred reported that the first test session at CITC for Ham radio license had taken place. This was the very last operation activity from DARC - HZ1AB, Thomas and Manfred did some 750 QSOs.

31 Aug 2004

Executive meeting: where it regrettably was decided to propose to the members that the club would be closed. CITC had issued HZ1AB to a new ham, new Station License requirements, so without a call and no Station License it was impossible to be on the air.

10 Sep 2004

The meeting formally closed the Dhahran Amateur Radio Club (DARC) – HZ1AB

Last Active Operators



Thomas, SM0CXU. At the end, the only remaining CW Operator, and the author to this History Book. Picture from CQWW-CW 1999. Note the two pre-tuned amplifiers (TT Titan and Alpha 91b), for swift moves between the bands



Manfred, DF1IK (SK) The last keen SSB Operator.
Manfred did very well at CQWW SSB 1999 SOAB, with 5,179 QSO he was 11th World, 2nd Asia

And the Antennas They Used



The 40m tower: The Force 12-5BA at the top (20-10m incl. WARC). Steerable Delta Loop 40m (2 driven elements). Delta Loop 80m. Support for center of 160m dipole. At the corner of the compound wall is the feed point of the steerable Beverage, last version with the double wires being replaced by a coaxial cable serving as antenna. Further we had the Log Periodic (6.5-30MHz) and the small Rhombic with 50m sides.



A closer look Coax-baluns for: The 160m Dipole (right of tower under the boom), Delta 80m (left of tower a bit lower) and Double Delta 40m (Lower, two baluns on common horizontal boom, right one close to the tower).