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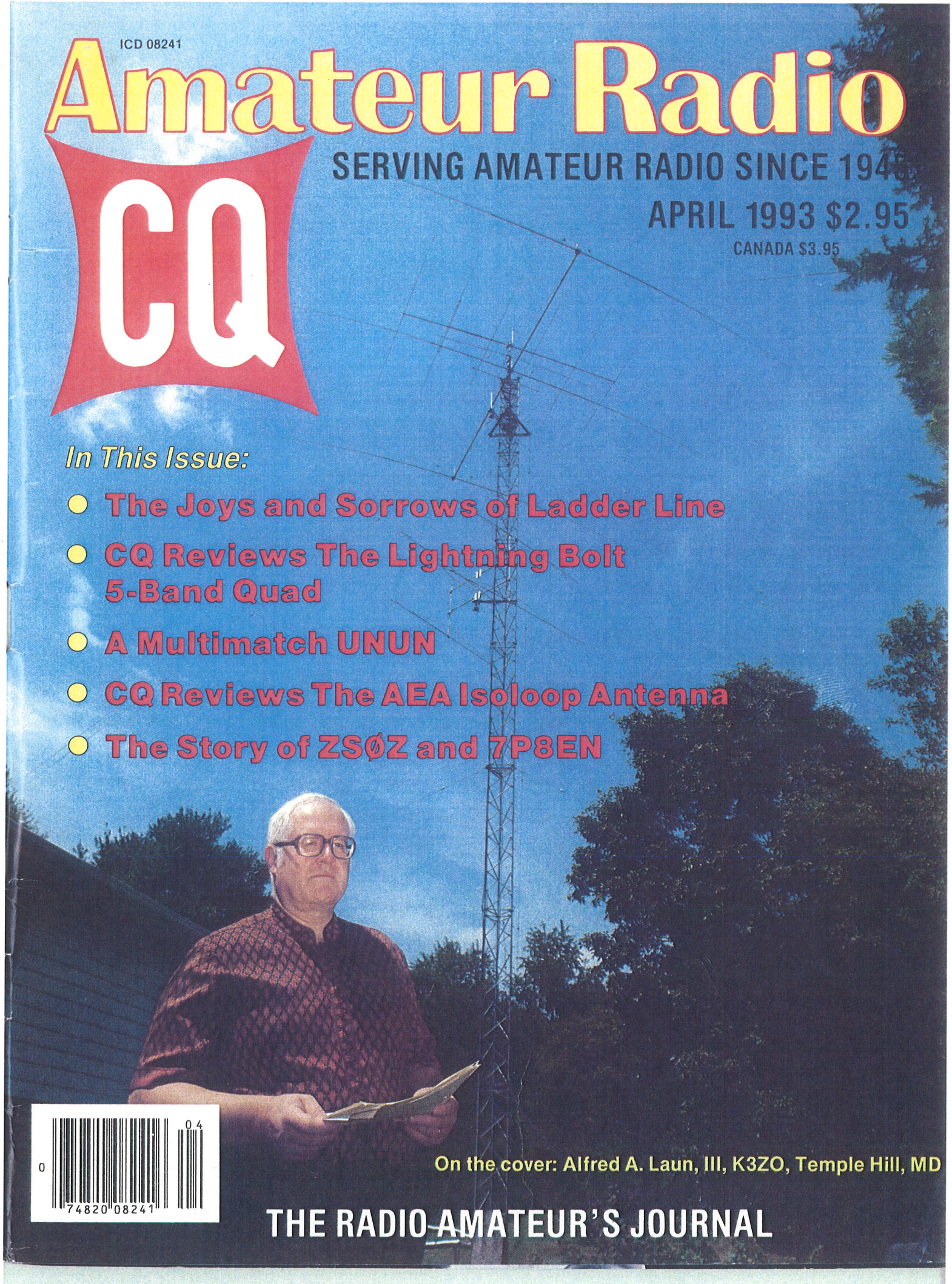

On the cover: Alfred A. Laun, III, K3ZO, Temple Hill, MD

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THE RADIO AMATEUR'S JOURNAL

Imagination and dreams. That's all it takes. One of of the big reasons we're all interested in improving our antennas is to increase our ability to talk to far-away places. ZS6EZ explains what it took to make some of our dreams come true.

Of Seagulls and Mountain Ponies
The Story of ZSØZ and 7P8EN

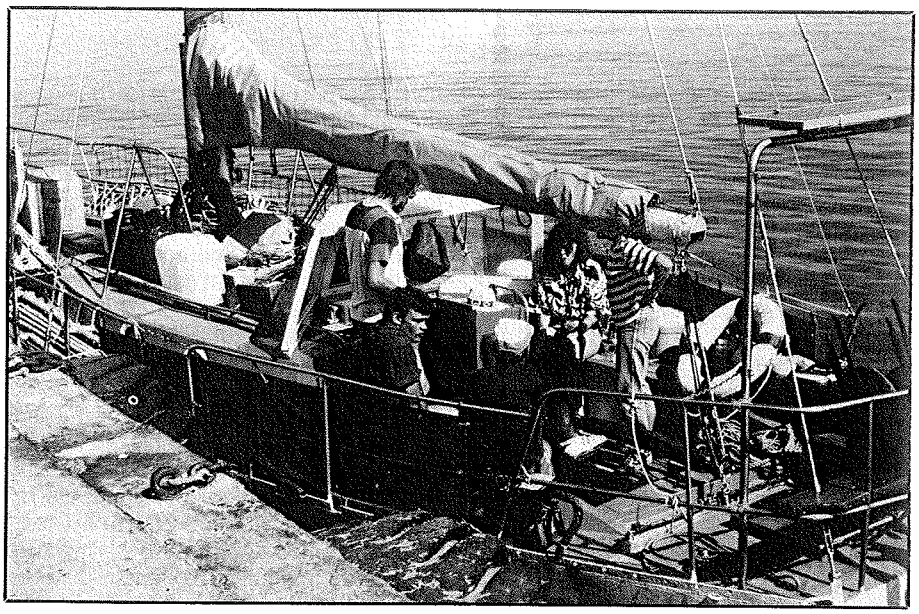
BY CHRIS R. BURGER*, ZS6EZ

It all started with a short note in a newsletter. It concerned a Battle Creek Special low-band antenna that was reportedly "significantly better" than the antenna I had been using. It sounded too good to be true, but I decided to investigate.

I wrote to Charlie Dewey, WØCD, about the possibility of making the plans available for the antenna, so that I could try to make a copy for DXpedition use. Charlie's reply was a surprise. *They* (there were other low-band DXers in Battle Creek, Michigan—Charlie, George Taft, W8UVZ, and George Guerin, K8GG—who were involved in getting the antenna together) had decided that I couldn't have the plans, but that they would do one better: They would make the Battle Creek Special Mark I available for a year. This antenna had become famous for its exploits on Bouvet Island. It had been responsible for the loud low-band signals from 3Y5X.

The antenna came complete with a shipping crate, which included all the necessary tools, supports, guys, anchors, radials, and even a matching transformer for 160 meters. The DXpeditioner only needed to transport the crate, plus a screwdriver and hammer, so that two people could set it up in about an hour. This sounded great. Even better, they had collected funds from a number of low-band DXers to ship the antenna to me. It would be available for a number of DXpeditions which I had been tentatively planning for some time.

Then political developments made up my DXpedition mind for me. I saw a newspaper story to the effect that South Africa and Namibia were negotiating a joint administration agreement for Walvis Bay and the Penguin Islands. Walvis Bay was annexed by Richard C. Dyer of HMS Industry



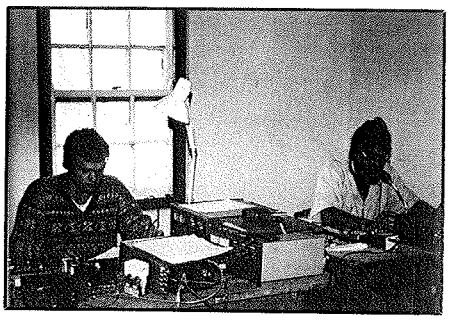
The yacht Sagitta *ready to sail for Penguin Island.*

in 1878, and enacted into law in both England and the Cape of Good Hope in 1884. The Penguin Island group was annexed to the Cape of Good Hope (then a British Colony) in 1861. The original proclamation mentions the islands by name: Ichaboe, Hollamsbird, Mercury, Long Island, Seal, Penguin, Halifax, Possession, Albatross Rock, Pomona, Plumpudding, and Roastbeef or Sinclair's Island. The annexation was formalized in 1874.

In 1890 an agreement on African territories was entered into between Germany (then colonial ruler of what is now Namibia) and England, specifically mentioning an agreement on these areas. In 1910 the Union of South Africa was established, and the Cape colony, with all its territories, became the Cape Province of the Union.

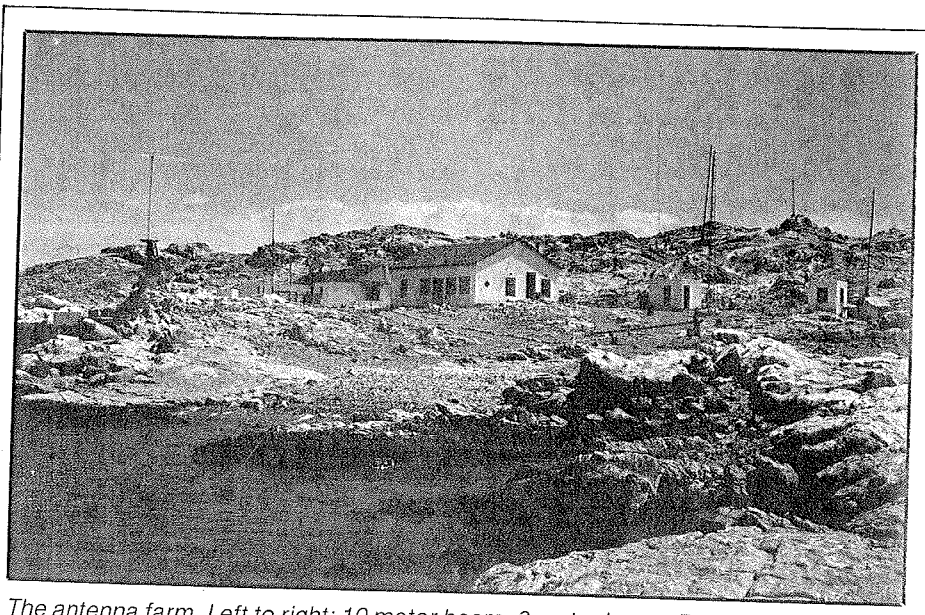
When the Republic of Namibia became independent, however, its constitution included in its definition of its territory "including the enclave, harbour and port of Walvis Bay, as well as the off-shore islands of Namibia."

As the existence of both Walvis Bay and the Penguin Islands on the DXCC list



ZS4TX and ZS6RAD manning two of the stations.

*P.O. Box 4485, Pretoria, 0001 Republic of South Africa



The antenna farm. Left to right: 10 meter beam, 6 meter beam, Battle Creek Special, and TH5DX.

hinged on the existence of Namibian territory between these areas and the rest of South Africa (DXCC rules section II point 3), it appeared to me that Namibian participation in their administration would jeopardize their DXCC status. This might then be the last opportunity to activate this DXCC country!

I had done most of the logistics for the previous year's ZS9Z/1 DXpedition from Penguin Island. Much of the equipment and the know-how was still available, so staging another Penguin Islands expedition would be relatively simple.

Operators were not easy to come by. I first approached G3XTT and ZS4TX, as I needed operators who could handle phone and CW, as well as the low bands. Don Field, G3XTT, was initially very keen, but had to pull out eventually due to a business trip and family commitments. Bernie van der Walt, ZS4TX, had joined me on a DXpedition before, but this time he had something else lined up. His Lesotho license, 7P8EN, was about to expire, and he intended to run one more operation from there. His leave had been set aside for that purpose. We eventually struck a deal. He would join the Penguin Island crew if I would operate from Lesotho on his behalf. I had a little more flexibility, and could squeeze in a second operation, so the deal was on. Bernie is an electronic technician, and is a proficient CW operator. He also has ample low-band experience. He recently became the first ZS4 to achieve 5BDXCC.

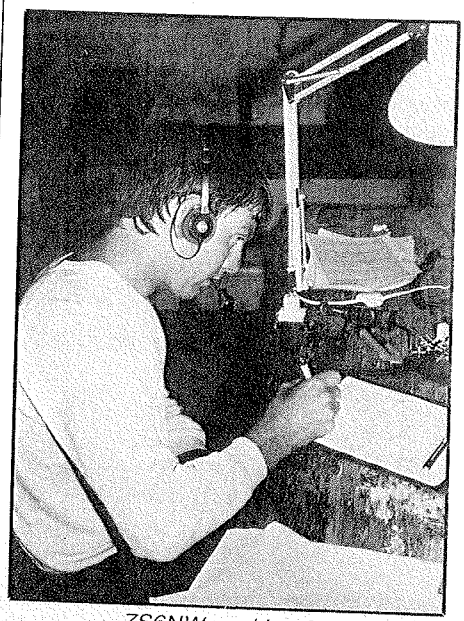
I also approached Rad Handfield-Jones ZS6RAD, who had been to Walvis Bay with me for the ZS9Z operation a year before. Rad immediately agreed. He is the holder of a PhD in mining geology, and is a department head at a Johannesburg college. He would be our VHF man, and he is a very tenacious phone operator, capable of respectable rates for long stretches.

This left me with a predicament: one week before departure, the crew was decidedly inadequate on the phone side for the task at hand. A solution came up when I discovered that ZS6BUV had leave and nowhere to go.

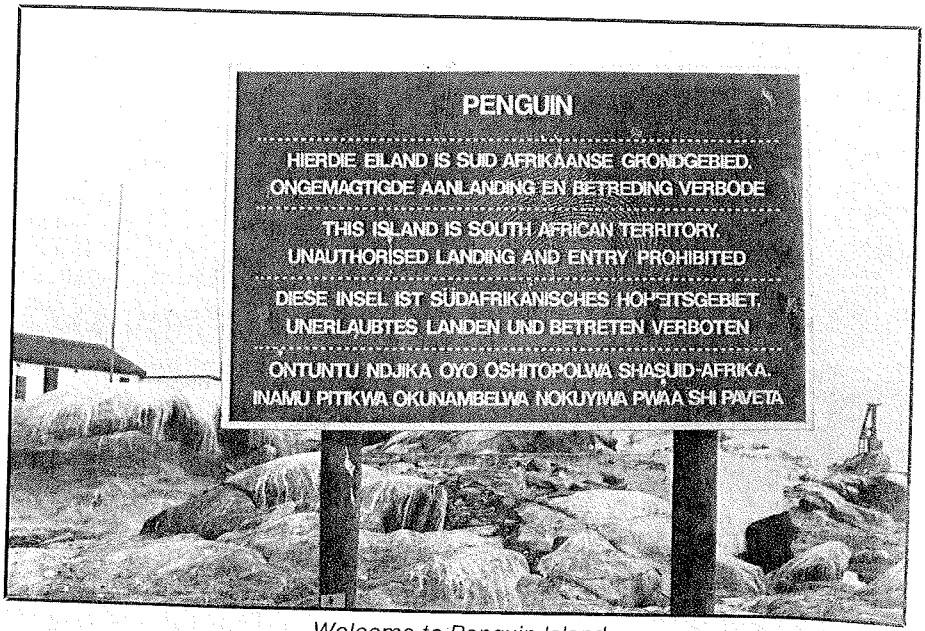
Jan van Niekerk, ZS6BUV (now ZS6NW), is an electronic engineer, and had recently been bitten by the contest bug. I had spent some time with him before the CQ WW DX Contest, and he was starting to wake up to the possibilities of big rates and big signals. He was keen to go, but had to approach his wife for permission to go. Her reply was a surprise: he could go, and at the same time she applied for a job as landlady and chef for the proposed trip. DXpeditions are always under-staffed, so her application was accepted immediately in the presence of witnesses. Ilze is a lawyer, and I wasn't taking any chances.

The callsign was a slight problem. With Bernie's help, I located the official with the necessary clout to make these decisions. He was a little apprehensive for various reasons. However, a thick pile of paper including a thoroughly documented motivation and many DXpedition stories landed on his desk, and ZS0Z became the first ever ZS0 callsign to be issued. It was, however, emphasized that this would be a one-off concession, and that the official prefix for the islands would remain ZS1, as always.

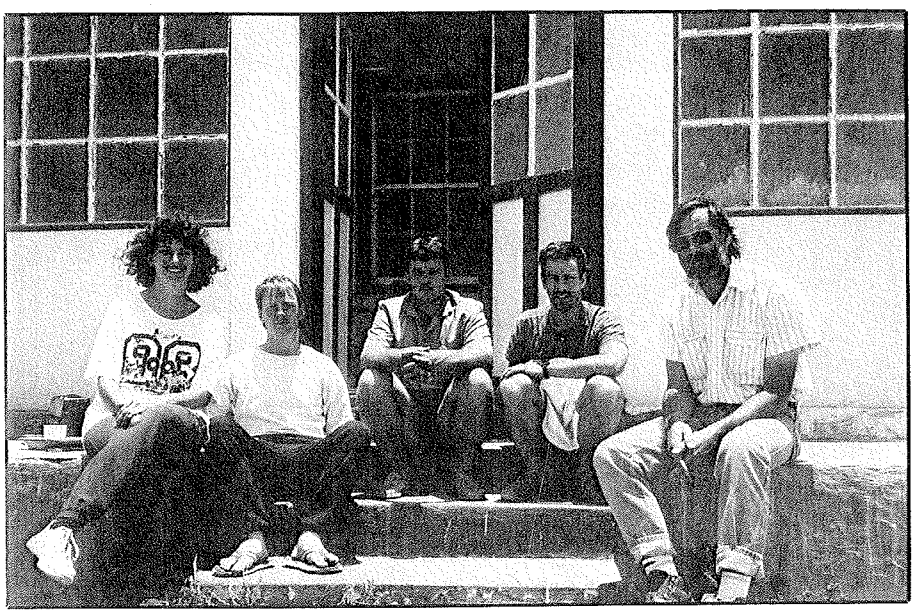
Some weeks before departure I wrote to Bill Poellmitz, K1MM, to request help in obtaining a Cushcraft A3WS for the WARC



ZS6NW working SSB.



Welcome to Penguin Island.



The crew: Ilze, ZS6NW, ZS4TX, ZS6EZ, ZS6RAD. (ZS6NW photo)

bands. Bill eventually managed, with some help from W1JR and K1GW, to finalize the deal within three days, and the antenna arrived with two days to spare.

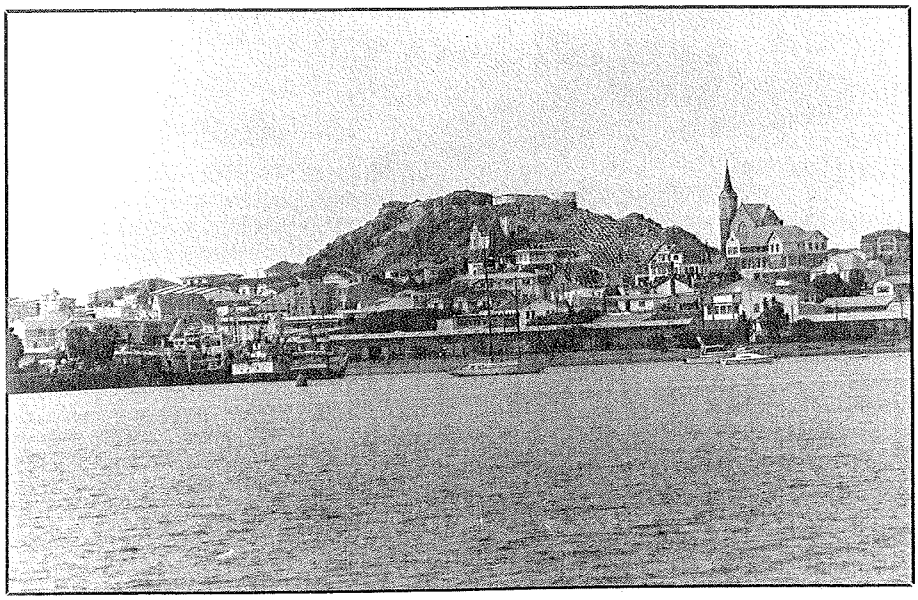
During the ZS9Z/1 operation we had been transported between Luderitz harbor and the island by Heiko Metzger in a small motorboat. This time he would be unavailable. However, he introduced me to a friend, Hans Rogge, who owned a yacht and would be prepared to help us out. A deal was concluded quickly, and the show was on the road.

A few inevitable snags had to be dealt with at the last moment. While packing the vehicles and trailers, we discovered that most of my liquid containers had hardened in the sun and had to be replaced. We are about 1500 meters above sea level, and the harsh sun hardens plastic in no time flat. We couldn't locate enough containers in time and had to introduce strict water rationing while on the island.

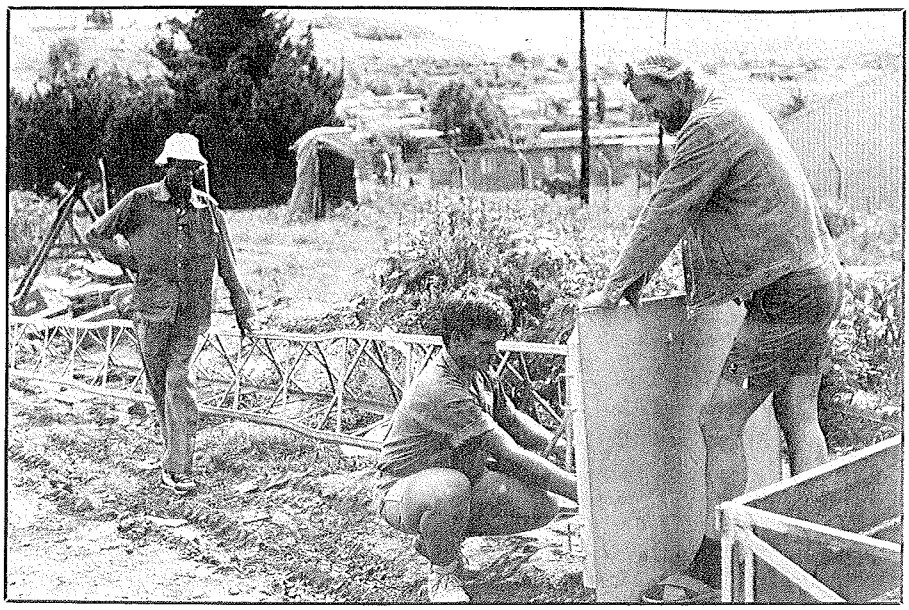
The Island

The distance to Luderitz is a bit over 3000 miles long and is a tedious journey in the extreme. Our convoy consisted of Rad's station wagon with a small trailer, and my sedan with a long trailer supporting all the antenna hardware and some of the other hardware.

My deal with Hans Rogge was that I would meet him at the docks at 8 AM. We arrived in Luderitz in the early hours of the morning and got a few hours of sleep in the deserted airport. Our troubles were not



Luderitz from the sea—more German than Germany. (ZS6NW photo)

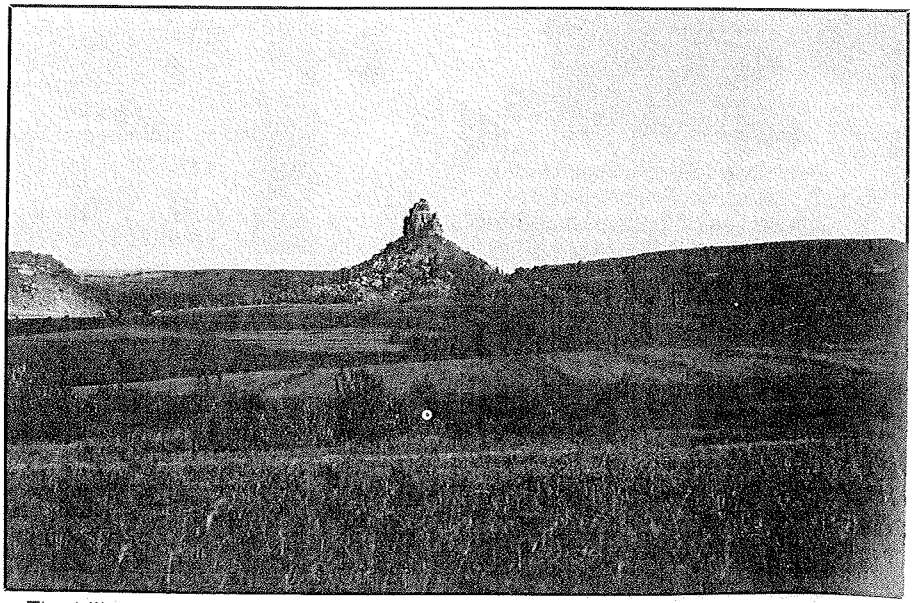


ZS4TX and 7P8EG putting the finishing touches on the tower.

over yet. We had to ask the Namibian police for assistance in locating the gas station attendant, who was nowhere to be seen at the official opening time of 7 AM. We finally located him almost an hour later.

Luderitz is not only an anachronism, but also seems totally out of place. It is a little piece of medieval Germany in the middle of the oldest desert on earth. The nearby ghost town of Kolmanskop was a beehive of activity during the last century, with an opera house that hosted visiting European stars at least once a week! The whole town of Luderitz is built in the German style, and German is still the most common language spoken there. Today it is still a diamond mining town, and most of the people in the town are connected with either the diamond mining industry or the fishing industry. Some of the world's biggest crayfish are found in the ice-cold water of the south Atlantic.

It has Namibia's only port capable of accomodating sizable vessels, and is connected to Keetmanshoop in the interior by a telephone cable, a power line, and a good road (only about 50% of its length is gravel). It is also in the middle of the *Sperrgebiet* (German for "prohibited area"), which was established on the Namibian coast to prevent pilfering of the uncut diamonds that litter this former seabed. This area is also known as the "Skeleton Coast"; it is totally barren and devoid of life, and many a shipwrecked crew has perished along its length. Straying more than a few meters from the road makes you fair game for the notorious "diamond detectives," a shoot-



The hill near Thaba Bosigu from which the traditional Basotho hat got its shape.

now-ask-questions-later bunch charged with taking care of the Sperrgebiet.

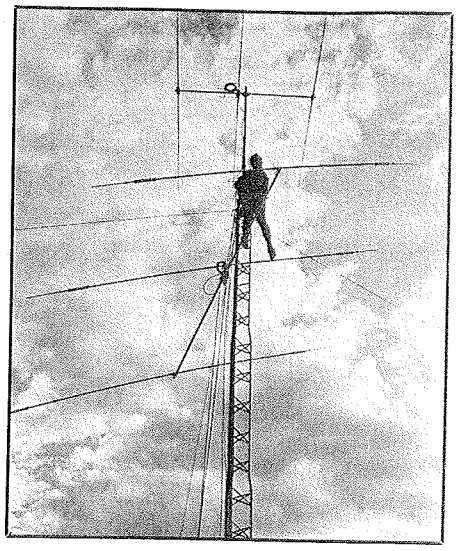
Luderitz also has the most corrosive atmosphere on earth. A double-galvanized chain section that I left bolted to a rock on Penguin Island had corroded to half its original diameter in only a year. Cars last about four years before they have to be disposed of, due to rust flaking. Driving a car during a sandstorm totally strips its paint and leaves bare metal that corrodes within days.

Even more scary than the sandstorms, which can move sand dunes onto roads overnight, are the pebble storms encountered on the islands. These occur when small pebbles (about ⅜ inch in diameter) are propelled at terrifying speeds through the air. Part of logistical planning for an island expedition is carrying enough provisions for a week more than planned; if the wind starts blowing, it may be impossible to get off the island for a week or more!

After a short trip we dropped anchor off the famous Penguin Island. It is incredibly inhospitable. No vegetation more than knee-high grows on the island. It is very arid, and the desert winds don't help either. Almost a million birds live on the island, and the ammonia from their droppings can be smelled on the mainland on a bad day. When humans first landed on some of the islands, the guano was up to 33 feet deep! The island consists mainly of solid rock, with some loose gravel and decomposing gull remains also in evidence. Some buildings from the guano mining era are still on the eastern side. Apart from some holes in the roof and broken window panes, a few of the buildings are still usable, and we chose two of these in which to set up shop.

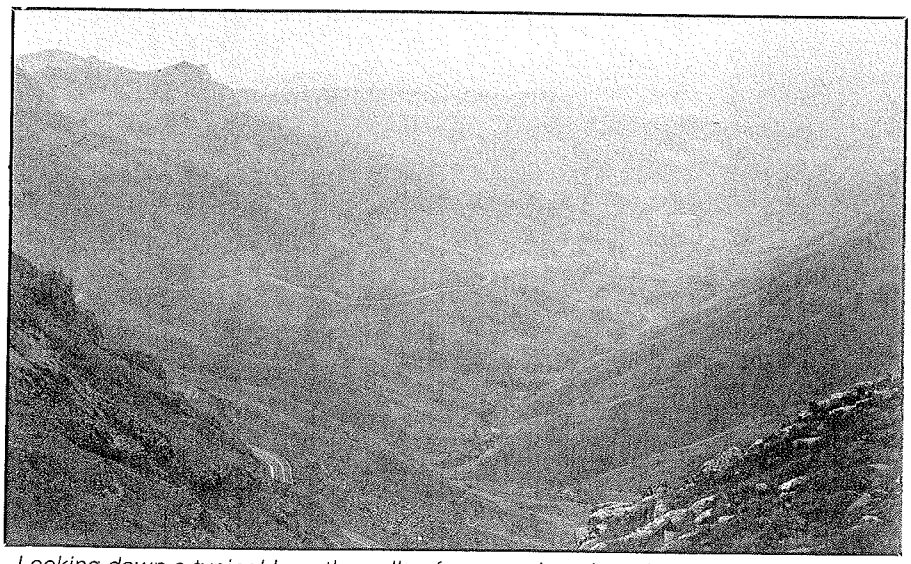
Seal Island is only a few hundred meters farther north, but its buildings are all very close together, and the landing area is not very safe. Also, the ground rises very steeply towards the west, which covers the path to the USA. This was the location of the first Penguin Islands operation by DK9KX and his group. They made about 12,000 contacts. The second operation was the ZS9Z/1 operation less than a year later, netting well over 30,000 contacts. This would be the third operation, and would try to clean up the more exotic modes and bands, as it was felt that most people had been given a fair shot at the country. The only exceptions were Japan and Europe, where the islands remained in the top 35 of *The DX Magazine's* Most Wanted Countries survey. We would try to work Japan whenever the band was open, as the path was a very difficult one.

We unloaded over 4500 lbs. of equipment in several trips with a light dinghy, expertly rowed by Hans. Then started the laborious process of setting up the stations. We finished by nightfall, and took to the air as ZSØZ on 21 MHz CW. Our TH5DX tribander was installed at the apex of the island, with a clear shot in all directions. This



The beams going up.

was the main antenna for the phone station. The second station had several antennas. The Battle Creek Special covered the low bands. A separate monoband Yagi went up for 28 MHz, and separate towers supported rotary antennas for the WARC bands and for 50 MHz. There were also wire antennas for 10 and 7 MHz. The third station was located in the same room as the second one, and would be used mainly for VHF and WARC band operation. All



Looking down a typical Lesotho valley from an elevation of more than 11,000 feet.

three stations could be operated simultaneously.

So started the tedium of around-the-clock operation for a week. We arranged the shifts in such a way that at least two operators were working at any given time. During off periods we had to sleep, build and maintain the station, and do some sightseeing.

After a few days the storm started. We had howling wind for about a day. This time was a tense one for all, and extra guys had to be added to some of the lighter antenna hardware. The 28 MHz monobander was on a thin pole, which ended up about 30 degrees from the vertical. The weather station on the mainland recorded 50 knots of wind during this period.

Bernie and I took over most of the CW and low-band operating. Rad did mainly phone, and spent a lot of time on the WARC bands. Jan spent most of his time on 10 meter SSB, and also did most of the RTTY operating. Bernie had nightly skeds on 40 meters with his wife, Tokkie, ZS4TZ. These skeds became a focal point of our attention —a sign that the real world still existed.

Getting off the island was more exciting than getting on. It was low tide, and most of the equipment had to be hand-carried across slippery rocks and waded through waist-deep ice-cold water.

We spent only a few hours in Luderitz, and I took the opportunity to send OH2BH a postcard as confirmation of our contact. Martti had been at ZS9Z/1 a year before, and this QSL was the only one he needed to get back to the top of the DXCC Honor Roll.

QSLs for ZSØZ are being handled by ZS6EZ (listed as ZS6BCR in all *Callbooks* before 1993).

The Mountain Kingdom

The party broke up on arrival in Pretoria. Everyone went home and slept the sleep of the dead. I had a lot to keep me busy, as I was scheduled to leave for Lesotho the next day. My car needed attention, and Tjerk Lammers, ZS6P, offered invaluable assistance. I also had to rearrange the equipment. Generators and a lot of logistics would not be needed at Lesotho, and the tribander was also left behind. Lesotho appears on 15 and 20 meters virtually daily, and on any self-respecting DX net one can imagine the occasional 7P8 quite easily. My first priority would be the low bands, and CW would be the mode of choice. I would also play on the WARC bands, and a bit of RTTY would be tried.

Bernie met me in Lesotho to help with the introductions and setting up. He introduced me to the Nordic Giant, Hans Smedstuen, 7P8EG. Hans is a construction supervisor, and had arranged a building site some distance from the capital, Maseru, from where I could operate.

The location worked well, but severe power-line noise and shaky power did hamper operations somewhat. We set up the Battle Creek Special for the low bands, a wire antenna for 30 meters, and a tower with the 10 meter monobander and the A3WS for 12 and 17 meters stacked at the top. Low-band conditions were terrible, and it took four days before the first 160 meter contact was made. The next three days made up for it, and several dozen stations were worked on this band.

After about the third day the power went off during the day, and I finally had an opportunity to see the place. Lesotho is also known as the Mountain Kingdom, and for very good reasons. Even its lowest point is over 3000 feet above mean sea level! The primary mode of transportation in the interior is a rugged breed of pony known as a mountain pony, which traverses terrain inaccessible to any other mode of transport. Lesotho is unique in being the only country in the world that is an enclave within another country. It has no routes to

the outside world except through South Africa.

The country had its origins in the 1820s, when the dynamic king Moshoeshoe (pronounced Mor-shwe-shwe) assembled his people at Butha-Buthe, in the north of the country. They soon moved to the mountain fortress of Thaba Bosigo. This is an amazing place. There are more than two dozen wells on the mountain, some of which are providing water to this day. The mountain is surrounded on all sides by sheer cliffs, and the few access routes were easily defended. More than 1000 people lived on the mountain and amused themselves by raiding surrounding farmers and "borrowing" their cattle. Several times the farmers tried to avenge the raiding parties, but their attempts were easily resisted. Eventually, the mountain was surrounded and a siege was maintained until the overburdened wells ran dry. The Basotho finally surrendered and returned the cattle that hadn't been eaten. Today Moshoeshoe and his wives are all buried on the mountain, and it is a national monument.

I also revisited the site of some previous 7P8EN operations, a 10,000 foot elevation spot on the new road for the Highland water project. This project includes the Katse dam, which will be the tallest dam wall in the world when completed. It is a joint effort by South Africa and Lesotho, and is intended to supply water to the major metropolitan area of Pretoria and Johannesburg, about 650 miles to the northwest.

I also got to meet Hans's family and a few of the local amateurs. Ray Schankweiler, 7P8SR (ex-JY9SR), had just arrived and was very active on the WARC bands during my stay. Ed Douglass, 7P8DX, was very active on 80 meters at the time, and was interested in hearing about the antennas and tricks used for high-volume work on the low bands.

As far as operating was concerned, RTTY proved to be disappointing. The terminal had a mishap on Penguin Island and never worked properly again. An attempt was made to find a workshop manual in the U.S., but without success. Therefore, no contacts could be made.

The WARC bands were good fun. The pile-ups never seem to get big enough to bring the policemen, but are always big enough to keep a run going.

Bernie van der Walt, ZS7TX, is the callholder for 7P8EN, and is taking care of the QSL cards, as always. His best address is Box 28691, Danhof, 9310 RSA.

The Aftermath

Immediately after arriving back I was absorbed in the rat race with a vengeance. I had to finalize one examination before graduating from university and had to start with a new job a few weeks later. I enrolled for graduate studies at university during this time, and started working on the database to get the QSL cards out.

The latter was a mammoth task. Firstly, the software had to be developed. I wrote the system in such a way that it required a minimum of typing, but entering into a computer tens of thousands of contacts logged by operators who were sometimes half asleep is still a formidable challenge. The better part of eight months eventually went into getting databases ready for 7P8EN and ZSØZ, and getting all the direct QSL requests in the mail.

I initially thought that ZSØZ would not give many people a new country, except possibly in Japan. The object of the exercise was, after all, to make it available on other bands and modes not covered by the first operation. I was mistaken. Over 100 DXCC Honor Roll members worked us for a new one, and over two dozen individuals needed only our card to complete them all! The total amount of mail exceeded two full mailbags, and just opening the envelopes took an estimated 100 hours. Over 7000 direct requests for ZSØZ QSLs have been handled.

The objectives of both expeditions were met. Despite indifferent conditions, about 2000 Japanese stations were worked. More than 140 non-African stations were worked on top band. The WARC bands produced almost 4000 contacts. And almost 10,000 contacts were made on 28 MHz. This included a large number of Novices, many of them indicating that this was their first DX contact.

I have been thinking about trading in my callsign for many years now, but always balked due to the fact that the old one enjoyed a certain amount of recognition and a lot of that would be lost with a call change. This time I figured that many thousands of airmail QSL cards would be available to help spread the word, so I finally took the plunge and traded ZS6BCR for ZS6EZ. I guess I'll get used to it eventually! At the same time, Jan also changed his call from ZS6BUV to ZS6NW.

A lot of individuals and organizations contributed to the eventual success of these operations. The Northern California DX Foundation contributed substantially to the expenses of the Penguin Island trip. K1MM, TI2HP, W1JR, and ZS5NK also contributed financially, while K1MM and WØZV helped with arrangements. K1GW of Cushcraft was very helpful. ZS6BDD of Cabletronics supplied the long run of feedline required to site the tribander at the apex of Penguin Island. ZS6BRZ made his TH5DX available. ZS6WB supplied VHF equipment. ZS6P supplied both generators. WØCD, W8UVZ, and K8GG lent the Battle Creek Special. Mr. Wolmarans of SAPT and Mr. Ramakoa of LTC were very helpful with the licensing issues. My father, as always, helped with the preparatory work that I could not find time for. ZS6VIP of VIP Electronics arranged for the timely repair of my radio, against considerable odds. And numerous other individuals contributed in some way or another to the ultimate success. Thanks to all!

And finally, the impetus for my decision to return to Penguin Island was the impending implementation of joint administration for the islands and Walvis Bay. An announcement was recently made by South Africa and Namibia that an agreement has been reached to implement joint administration for these areas. At this writing details remain to be finalized, so there is still a little time for someone to go to Penguin Island and give me the place for my DXCC. I must be the only DXer in the world who still needs it!