

THE KL-7 IN VIETNAM

COMSEC Support for the TSEC/KL-7 at Air Base Saigon

Darwin Maring

I was a Crypto Maintenance Tech in the U.S. Army. While in the Army Security Agency (ASA) in the mid-1960s, I saw the KL-7 being used to decrypt double encrypted messages. The only person to use and see those message was the Communications Center NCO. The ASA handled highly classified information, and I suppose the message went directly to our General. ASA was a really secret unit where all of us had the highest security clearance, B4 SCI. That was their way to compartmentalize information.

During the later 1960s, I was assigned to the Field Army Issue Office (FAIO) and worked in the vault of the I.G. Farben Building in Frankfurt Germany, the headquarters for the US Army V Corps and the Northern Area Command (NACOM). We were a twelve-persons team of Maintenance Techs doing depot level maintenance. Our bulk was the KW-7 and a smattering of KL-7 repair.

In the period 1970-71, I was the non-commissioned officer in charge (NCOIC) of the Special COMSEC Support Unit at the Air Base in Saigon, South Vietnam, providing crypto maintenance down to the component level. Our mission was to support the crypto unit of the Army of Republic Vietnam (ARVN), co-located in the same building.

The KL-7 was issued to the ARVN in 1971, and we taught them how to perform basic maintenance and operation of the machine. We also issued the Hagelin licensed M-209B, and they had a plethora of Crypto AG units, some with keyboards. Already in 1964, the ASA 7th Radio Research Unit analyzed the use of the KL-7 by the ARVN.

Other than the above, I never used a KL-7 to process messages. When working as Tech on the KL-7, we always used maintenance rotors and never classified operational rotors. A major problem were the big heavy-duty diodes. If one went bad, we replaced all four, because if we did not, another diode in the set would go bad shortly after. For motor speed adjustment, we used a stroboscope.

The number one operational problem was keeping the keyboard, the rotors and other contacts clean. The machine had to be really clean for it to work properly. Being a maintenance person, I only saw one being used in a Communications Center at ASA Germany, and it was used in a double encryption situation where the Communications NCOIC was the only person allowed to decrypt and see the message.

I firmly believe that those crypto machines were abandoned when the North Vietnamese Army invaded the south and took over. At no time did I see any destruction devices in their side of the building, and once issued to the field units, I suspect destroying what they had was not important to them at that time. The Australians and New Zealanders also used the KL-7 and KW-7, and they protected those machines like we did.

We also supported the South Koreans in Vietnam with the SSM-33 (SIGTOT) one-time tape mixer that I never saw them use. I was the SSM-33 trainer for the South Koreans. I would go to the Korean Base at Zion in the jungle, and their SSM-33 was housed in an old French Bunker. I would connect the units, and when I left, they would disconnect all wiring and put the units away.

The SSM-33 was connected to a TT-4/TG Teletypewriter, and they did not have any sort of flashlight or stroboscope to adjust the motor speed, so the TT-4 seemed to run at full speed. The line between Zion and Saigon was also used as a phone line. Having an ethnic Korean minority in Vietnam, South Korea had sent over 300,000 troops to South Vietnam. From 1964 to 1973, the South Korean Army, Marine Corps, Navy, and Air Force all participated as an ally of the United States.

In Vietnam, we lived in the same building where we had our maintenance facility, co-located with the ARVN crypto office across the fence from camp Alpha and had our meals at the Air Force. Outside, we had half of a metal aircraft engine crate that we filled with water, heated by the sun, and took baths in it. It was big and round, I believe it was used for radial engines. At Tan Son Nhut Air Force Base, we had clubs and restaurants that we would use. Right outside the main gate was the Cholon district of Saigon. We went into Saigon all the time. There was an American bowling alley in Saigon that we would go to.

I was also flown to the Australian base in the jungle. Their crypto people arranged that for me, and I had a fun time with them. They really lived primitive, in tents. Some 60,000 Australians served in Vietnam over a period of ten years. Being out in the jungle from time to time is more than likely where I caught the Agent Orange. From the Air Force base in Saigon, they sometimes flew their spray planes out of there.

The KW-9 was an online version of the KL-7 on steroids. I was the last class to be trained on that machine. Ever saw one after school. What I was absolute great at was the KW-7, as I worked down to the component level on that thing for over 2 years and even more at lower maintenance level.

So, in conclusion, I strongly feel the KL-7s and Swiss Hagelin devices were abandoned by the ARVN. It has been said our units also abandoned some old equipment.

© 2024 SFC Darwin Maring, USA, Ret.

Version 1.0 Written for [Cipher Machines and Cryptology](#).

More information on the KL-7 is available at the [TSEC/KL-7 ADONIS & POLLUX webpage](#).