

## INVITED TALK:

# The Israeli Enigma

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### Abstract

From its early days, the Israeli military has developed a Signals Corp to provide effective and secure communication to the needs of the defense establishment. From the start, there was good cooperation between the functions of cyphering and deciphering, although they were conducted by different organizations, to assure the security and reliability of military communications.

As soon as Israel gained its independence, it became a key target for British intelligence collection. British espionage activities on Israel were coordinated from the Security Intelligence Middle East (SIME) headquarters near Cairo, and later from Cyprus. The nascent Israeli cryptography was of special interest for British intelligence, as Britain still maintained a substantial military presence in the region, especially at the Suez Canal in Egypt and in Jordan. In the early 1950s, British intelligence embarked on a covert operation aimed at giving them access to Israel's most secret communications. The Israeli Defense Forces (IDF) looked for an advanced cypher machine to replace the hand-cypher, which caused bottlenecks of huge numbers of messages. Israel succeeded in purchasing from the United Kingdom 50 Enigmas in good order, and believing in the Enigma's invincibility, invested substantial effort and cost to transform them in great secrecy into Hebrew. However, before these Enigmas were put to operational use, a warning was received from several Israelis, who were former members of Bletchley Park's staff, on British successes in cracking the Enigma during WWII. A decision was made to abandon the Israeli Enigmas. Most of the Hebrew Enigmas were sadly destroyed, only one example was retained and is today on display at the IDF heritage center.

In the British Bletchley Park team were several persons who later immigrated to Israel, including Prof. Joseph Gilis, who founded the Department of Mathematics at the Weizmann Institute and Dr. Walter Eytan, the First Director-General of Israel's Ministry of Foreign Affairs. Two other Jewish experts from South Africa, Shaul Bar-Levav and Meir Shapira, were the founders of the IDF units of cyphering at the Signal Corp and deciphering in the Sigint unit. Colonel Shaul Shamai, a prodigious decoder of Arabic codes, was the only soldier who was decorated by an IDF Chief of Staff who had not fought on the battlefield, a testimony to his crucial contribution to deciphering key Arab cyphers.

### Bio

Brigadier General (Res.) Dr. Ephraim Lapid is a lecturer at Bar-Ilan University and IDC Herzliya Israel. He served as a Senior Intelligence officer in the Israel Defense Forces (I.D.F) and was the I.D.F. Spokesperson and Instructor in the Israeli National Defense College. After retiring from the Israeli Military, he was a senior official in the Jewish Agency.