

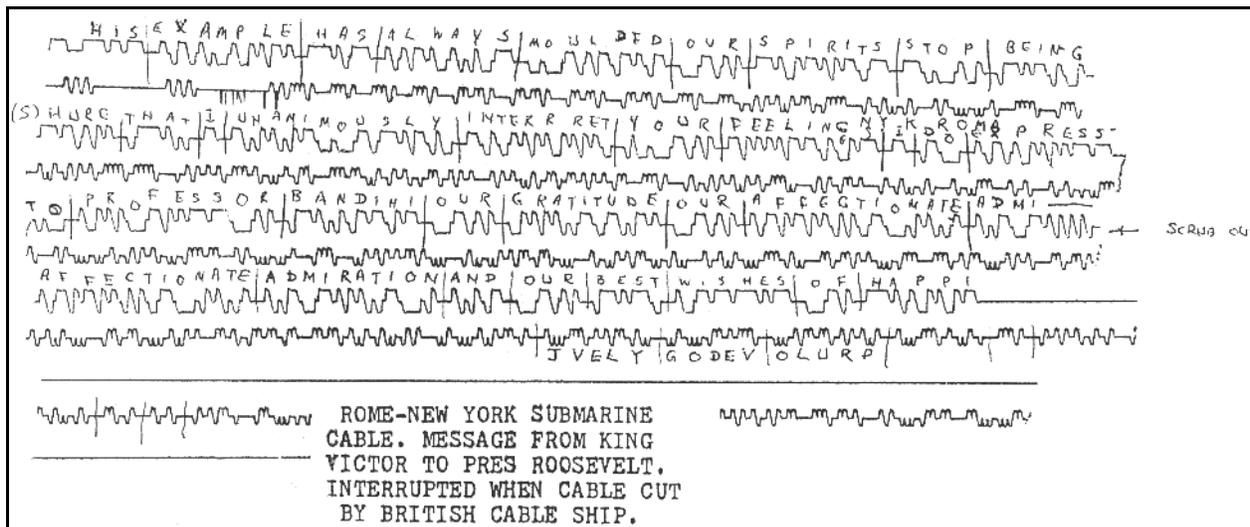
The cutting of the Italian trans-Atlantic cable during WWII

Donard de Cogan

Much of the history of the Italian trans-Atlantic cable is summarised in the other entry on these web-pages and can also be accessed at <http://atlantic-cable.com/CableStories/WG-MK/index.htm>

Here we consider one specific item that is mentioned in that paper, namely the cutting of the Italian cable just as Italy entered the second world war on the German side.

Several years ago this author was researching in the Maritime History Archives at Memorial University in St Johns, Newfoundland. He encountered a service message in cable code. It was in fact a Christmas greetings telegram dated 24 December 1926 and had been sent by Walter Graves in Anzio to his friend and compatriot, Marshall Killen who at that time was an electrician in the Western Union station at Horta, one the islands in the Azores (Killen eventually became station superintendent and oversaw the closing of the Western Union station at Horta when cable telegraphs gave way to cable telephones). By coincidence, this author was meeting Killen during the same visit to Canada. In return for a copy of the 1926 Christmas greetings, Killen gave the author a copy of a message which he had 'acquired' on the day that Italy entered the second world war.



Message intercepted by Marshall Killen with his note. (Copy given to D. de Cogan in Oct. '85)

Killen claimed that it had been the message that was sent by the King to President Roosevelt and provided the following explanation:

"You must understand that the Azores was a regeneration (signal restoration) station with each cable working in duplex (messages simultaneously in both directions). At the end of each cable we had a recorder which showed the passing traffic (in cable-code). Thus there was one

on the east side for the cable between the Azores and the next regeneration station (Malaga). There was also one on the west side for the cable between the Azores and New York. I was on duty at the east side as the message from the King to President Roosevelt was going through and retained the internal record or slip as it came off the Recorder. The slip (above) shows two messages: the 'incomer' is a bit indistinct but is in-clear (not enciphered) and the 'outgoer' or reconstituted signal, some of which is in five-character cipher. It is easy to read the outgoer. Each pulse above the centre line is a dot and each pulse below is a dash. Because of distortions on the cable the incomer is more difficult and you must judge the number of dots or dashes by the length of a group. You can see the exact point at which the cable has been cut and you can also see that New York, unaware of this, continues to transmit"

A translation of the 'incomer' reveals that it is as Killen described, Author's notes are in lower case between parenthesis

HIS EXAMPLE HAS ALWAYS MOULDED OUR SPIRITS STOP BEING
 (s)HURE THAT I UNANIMOUSLY INTERPRET YOUR FEELINGS I DO EXPRESS
 TO PROFESSOR BANDINI OUR GRATITUDE OUR AFFECTIONATE ADMIR
 (delete)
 AFFECTIONATE ADMIRATION AND OUR BEST WISHES OF HAPPY _____ _
 _ _

(the line indicates the point at which the cable has been cut)

However, the outgoer is particularly interesting as it reveals the rapid transmission of several messages, including one, apparently in cipher.

A literal translation of the 'outgoer' with author's notes in lower case between parentheses

.(idler) .(idler) (idler with signal cut in) \overline{SN} \overline{SN} \overline{SN} STC PU6 NYK ROMA4 =
 PCA44 TREASAMEX SIGNATURE REQUIRED \overline{SN} KCPA3 CDE NYK A7 AA
 AAT7
 A ROMACAMBI ROME = GREFO YGLXO AGLMY APOSY UFEOB VLORA UF
 APO XUOPE IADID IUPYC GOPIN JVELY GODEV OLURP JVEGT \overline{SN} NRANN
 NYK UN AA NLT (lost under Killen's stick-on label of explanation) (?)RARI VIA RODI
 27

The signal comprises an idler (+--+). According to John Packer of the Porthcurno Museum of Submarine Telegraphy this was intended to help intermediate relay stations to stay in synchronisation and also to act as an ongoing end-to-end continuity check. The idler is interrupted by the Morse characters S and N run together as (dit dit dit dah dit and designated as \overline{SN}). Each has a header which comprises a service code presumably designating addressee and any other information and terminated by a break or equals sign (dah dit dit dit dah). The second message is in-clear, but uses codes (e.g. PC44). The groupings of letters in the third message have been checked but do not appear in Bentleys or other widely used code books. We therefore assume that it is in a five-character cipher. The fourth is incomplete.

Contextual translation of the 'outgoer' with author's notes lower case between parenthesis

(idler) .(idler) (idler with signal cut in) \overline{SN} \overline{SN} \overline{SN}

STC PU6 NYK ROMA4 = PCA44 TREASAMEX SIGNATURE REQUIRED \overline{SN}

KCPA3 CDE NYK A7 AA AAT7 A ROMACAMBI ROME

= GREFO YGLXO AGLMY APOSY UFEOB VLORA

UFAPO XUOPE IADID IUPYC GOPIN JVELY GODEV OLURP JVEGT \overline{SN}

NRANN NYK UN AA NLT (obliterated) (?)RARI VIA RODI 27 (end of record)

This author has been unable to determine precisely which UK Post Office cable-ship undertook the cutting of the Italian cable (believed to be *cs Iris*). Nor has he been able to determine the precise location where it was cut (believed to be in the Straits of Gibraltar). He would also like to know more about the subsequent war-time utilisation of the cable. According to Killen, it was diverted into North Africa at the time of Operation Torch " . . . so that Eisenhower could have a line of communications that would not be eavesdropped on by the British" Details of the Torch landings in accessible UK naval archives indicate that the invasion fleet included a cable-ship, but its identity is unknown. He would be very interested to hear from anyone who could shed further light on the prematurely terminated telegram or on the history of the cable during those turbulent times.

The author is indebted to John Packer of the Porthcurno Museum of Submarine Telegraphy for correcting some errors in his initial reading of the outgoer cable code and for providing clarification on some of the finer details of cable telegraph communications.