

(continued from previous page)

Persons seeing photographs of tanks observe a long metal rod sticking upward from the heavy armoured craft. This is no "buggy whip" for the battle wagon. It's the antenna of the tank's radio transmitter. The rod is the only visible suggestion of the extensive radio and communications equipment with which every tank on the battle fronts is equipped.

The transmitter, about 14 inches high, 18 wide and a foot deep, is mounted on the inner surface of the turret. The receiver, about half as big, is placed alongside the transmitter.

The tank commander normally directs radio communications. He can stand upright, or sit on a jump seat, which swings out of way when not in use. Frequency - modulation circuits are employed, because of their noise-reducing qualities, a factor especially important in tank warfare.

The ultra-high frequencies (short waves), are used, the shift from one frequency to another being made by push buttons.

The whole technique is designed to foil enemy eavesdropping.

Radios are not only essential to the infantry and tanks, but to scout cars and virtually all other army mobile units, including the cavalry with its "guidon sets."

The cavalry "guidon set" has a longer range than the "walky-talkie" and is built in two sections. One straps to the chest of the communications man; the other is installed on a guidon staff, which can be mounted in a cavalry boot or on a motor vehicle.

To be sure, telegraph and telephone communication is still vital to the army, even though radio is the newest development. Men of the signal corps make use of all kinds of communications, and at signal corps schools they are taught all phases of telephony and telegraphy, from laying wire to pole climbing.

Throat Microphones

The air forces, of course, depend largely upon radio, although members of a bomber's crew talk to each other by telephone.

By means of a throat "microphone" a pilot can talk by telephone or radio without interference from sound of guns or motor. The tiny "mikes" are in two buttons held against his throat.

Radio has revolutionised naval warfare since the day in 1919 when the navy boasted that a ship could receive a spoken message from 600 miles away at sea, but could not reply to it.

To-day, radio reigns supreme as the basis of all communications at sea. Messages from point to point on shore, from shore establishments to the fleet, and between different units of the fleet are conducted by radio. Important shore stations can reach any point in the world, and in addition, each naval district has a radio station near its headquarters.

In a recent speech to workers in an American electronics factory, an officer said:

"Someone may ask, 'what damage can we do the Japs and Nazis with one of these little radio tubes?'"

"That would be an easy question for the crew of a Flying Fortress on its way to bomb a Jap Island base. It would be equally easy for the crew of a tank in Italy. Many, many times for both, the radio tubes have been the margin between life and death, victory and defeat."

So Fine... So Smooth

IT BECOMES A PART
OF YOUR
YOUTHFUL
COMPLEXION



Three Flowers Face Powder lends new naturalness to your make-up

A face powder that is lighter-textured, finer... designed to let youth glow through. That's the accomplishment of the Three Flowers' beauty experts today. It's a powder that enhances the *natural* beauty of your skin... spreads a thin veil of loveliness that gives your skin the softness, the smoothness of youth.

You owe it to your loveliness to try the Three Flowers today. *Five* shades to select from!

TRY, TOO, THREE FLOWERS LUXURIOUS FACE CREAMS



three flowers

Face Powder · Lipstick · Rouge

A CREATION OF RICHARD HUDNUT

Richard Hudnut Limited, Federal Street, Auckland