



Urban warfare

Gaining Height

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Tactique générale

The urban environment is becoming an essential terrain for modern warfare, as we have seen in Bosnia with Sarajevo, in Iraq with Falluja or in Grosny in Chechnya. It is highly diversified: residential areas which can be more or less dense and which alternate with industrial and commercial areas, office buildings, railway stations, airports...

This particular environment contributes strongly to an "equalization" of power relations, as conventional weapons systems are sometimes unable to be used or are limited in their use. An additional factor that is rarely taken into account is the third dimension that can give the defender a definite advantage.

For example, a 10-storey apartment building can be up to 30-35 metres high, a 15-storey office tower can be up to 50 metres high.

However, in some parts of the world, such as Western Europe, neighbourhoods with buildings of this height have multiplied in recent decades.

This means that defenders (especially if they know their city well) will surely be able to see a column of reinforcements or attackers coming from quite a distance. And this factor must be taken into account both in terms of approaching a city or a given area and in terms of an "assault" carried out on a specific part of the city.

The urban environment is becoming an essential terrain for modern warfare, as we have seen in Bosnia with Sarajevo, in Iraq with Falluja or in Grosny in Chechnya. It is highly diversified: residential areas which can be more or less dense (classic street with houses side by side, cities composed of buildings or residences, cities with individual pavilions)

and which alternate with industrial and commercial areas, office buildings, stations, airports...

This particular environment makes a major contribution to the "equalisation" of power relations, as conventional weapons systems are sometimes unable to be used there or are limited in their use. An additional factor rarely taken into account is the third dimension which can give the defender a definite advantage.

For example, a 10-storey apartment building can be up to 30-35 metres high, a 15-storey office tower can be up to 50 metres high. In the first case, the distance to the horizon is at least 20 km, in the second case it is about 25 km.

However, in some parts of the world, as in Western Europe, neighbourhoods with buildings of this height have multiplied in recent decades. This does not mean that any observer will be able to monitor up to such a distance. Obstacles formed by other buildings, vegetation or the surrounding hills will generally prevent him from having a clear view, and not every observer will have a pair of binoculars or a telescope at his disposal.

Nevertheless, this means that defenders (especially if they know their city well) will surely be able to see a column of reinforcements or attackers coming from quite a distance. And this factor must be taken into account both in terms of approaching a city or a given area and in terms of an "assault" conducted on a specific part of the city.

It is therefore advisable, as far as possible, to use terrain obstacles such as vegetation and relief to lead the preliminary approach to the city in order to minimize the surprise effect. Likewise, parallel axes or axes arriving at an angle towards a high residential area should be favoured so that possible lookouts do not see the forces arriving until the last moment.

Conversely, gathering intelligence on these areas can be difficult: the opponent can see you, while the reverse is not true, which puts the attacker at a distinct disadvantage. The use of technology can in this case partially compensate for this disadvantage.

A "classic" light quadricopter UAV can thus be implemented at company level without too much difficulty and at a reasonable cost. If, in addition, it can be equipped with a magnification optic and infrared optics, it can be very useful.

Indeed, being able to see what is happening in a given area, to see what is happening on the roofs of the area (including the preparations of the defenders) or inside certain buildings will offset the initial advantage of those who are more familiar with the local environment.

The third dimension in the context of urban combat thus becomes a major issue. The high-rise buildings that have become commonplace in large metropolises give the defenders a definite advantage in terms of observation. This advantage in terms of approaches can be compensated for by carefully chosen routes and for observation by the use of modern technologies now available at reasonable cost.

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