

Heliborne Air-to-Air Firing Unit

Concept

As mentioned above, air picture provided by AEW Helicopters and information about targets passes to certain firing units (cuing) which from its side use an “ambush tactics”. And modern beyond visual range (above 40 km) air-to-air missiles utilizing an inertial navigation with target data update at midcourse and active radar or IR homing at terminal phase are quite flexible to carrying platform. For example, on based on such missiles at least three types of ground based air defense systems are known.

Those are:



SL AMRAAM (by Raytheon)



Spyder (by Rafael)



VL MICA (by MBDA)

And, so, we see an expediency to use for such missiles another platform – particularly, to use a helicopter equipped with conventional Airborne Fire Control Radar.

Two possible platforms (helicopters) can be considered for this purpose.
Those are:



AS 365 Dauphin (this is Search & Rescue Helicopter of US Coast Guard)



Sikorsky HH-60J Jayhawk (on base of famous Sikorsky S-70)

Both these helicopters allow installing of radar at their nose.
And integration of chosen model of missile would not be a problem for qualified contractor and that is only a financing issue.
As result of such integration helicopter will not become a true air-to-air combat system allowing e.g. “dog fight”, but that will become only an extremely mobile and therefore **extremely survival air defense system.**

Tactics of usage will be very simple:

Once receiving of cuing data from AEW Helicopter, Heliborne Air-to-Air Firing Unit pops-up, switches-on radar, finds target/targets, fires at that/them missiles and then after engagement lands to another position.