## **Multicopter Autonomous Refueling System**

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Nowadays drones are becoming a main topic in research and development as their use is increasing day by day in all domains. Today a drone infinite flight has become a prerequisite but unfortunately a drone cannot have an infinite flight without landing to recharge. Multicopter Autonomous Refueling System is a full communication system between drones endowed with intense power of computing and artificial intelligence. The mechanism allows drones to interchange simultaneously information like position and object in order to build a completely operational refueling system by refueling the source of energy in full flight . Starting with a very high stability flight requires an intense power of computing which is a connection to a server that calculates in real time the Proportional Integral Derivative (PID) through the flight conditions and facilitates the communication between the drones when far from each other. The Coding of artificial intelligence also allows the real time interaction between the drones when they are next to each other. The interchange of objects in full flight has led to the creation of a refueling system which will achieve the purpose of a drone infinite flight. To conclude, a refueling system between multicopters will allow the interchange of the source of energy in full flight. This solution is the fruit of combining high power of computing with artificial intelligence.