October 6, 2020

EXECUTIVE SUMMARY CCAS

Ciconia's CCAS (Coordination and Collision Avoidance System) enables airborne collision avoidance at the low-level flight regime.

The system is compact and lightweight and can be easily installed on a large variety of aerial vehicles. A system's derivative based on the same components, enables automatic airborne conflict management for multiple aircraft flights conducted in a confined air-volume.

Current and future operational characteristics of manned and unmanned aircraft operations especially in the urban skies is expected to be very dense in order to be economically justified.

Future aerial operations above the urban skies cannot take place unless flight safety margins are applied and adhered to by all users. Ciconia's technology enables all users to secure very high flight safety standards. At the same time, the system enables the regulator to issue flight operations approvals to heterogenic operations carried out by a large variety of aircraft types in a given airspace. Ciconia's system is based upon a diversified communications ad-hoc network that is insensitive to the centralized based communications systems typical to the low-level urban environment limitations. Ciconia's CCAS was developed to provide alerts for dangerous airborne proximity conditions by way of aural and visual cues to the manned and unmanned pilots to take instantaneous actions for collision avoidance. The system provides these cues to change the current flown flight path efficiently, precisely and expeditiously and even takes over the unmanned aircraft autopilot when these UAV/UAS disregard the given piloting cues.

Ciconia develops unique communication interfaces with those aircraft users that would not install and utilize Ciconia's CCAS. The system is based on a complex algorithm with machine learning elements for autonomous continuous improvements.

The unmanned aircraft market is growing at an exponential annual rate and is estimated at tens of billions of USD.

The regulators will be reluctant to enable economic flight volumes without adopting a unique technological solution providing acceptable safety of flight standards.

Ciconia is active in efforts to indoctrinate the unique concept as described above throughout domestic and international users, manufacturers and regulators both military and civilian.

Ciconia's business model is based on selling systems to users and fleet owners at reduced prices while securing monthly/ yearly system upgrade subscriptions.

Exposing the regulators to the expanding opportunities opened by the CCAS introduction will eradicate one of the major obstacles to the market development exploiting the above-mentioned benefits. To date, no known relevant competitors exist that can endanger Ciconia's CCAS advanced, patent secured products.

Following a very successful Demo/trial in front of a valued customer October 1 2020, Ciconia is preparing the 2 nd stage CCAS demonstration. The intended demonstration will show the 'live in harmony' concept exercised by 2 aircraft types sharing the same airspace while maintaining the highest level of flight safety. Additional system development deals with size, weight, energy consumption and price reduction so as to enable mass system market penetration and installation benefit.