CARGO TRANSPORT

speedbird .aero

DRONESVIP | CIVIL AERONAUTICAL TRAINING CENTER

DRONESVIP

DLV-1 NEO TAKE-OFF AND LANDING PLANNING

To plan a delivery mission, it is essential to respect the maximum distances and heights according to our operations manual and regulations of our country of origin.
Each area of operation must be analyzed in detail with respect to:

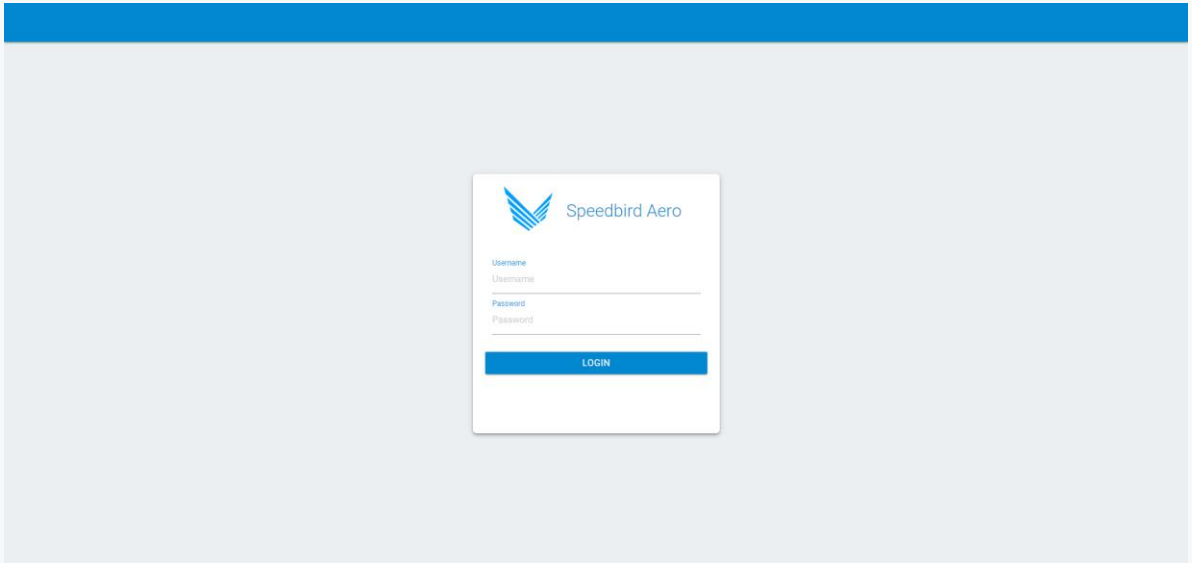
1. Take-off and landing (free and delimited area)
2. Coordinates(extracted from Google earth/maps/drone position) for mission planning.
3. Natural and artificial obstacles to our route.
4. 4G connection en route to avoid connection losses.
5. Personnel authorized to act in the event of a possible failure of the equipment in the delivery area and route.
6. Evaluate maximum travel distances according to type of flight.

IMPORTANT: for our droneports/dronepads, it is important to delimit the area well with an operating radius of 20 meters from the center of the ARUCO(QR), and delimit the area with cones or fencing.

DLV-1 NEO COORDINATE
EXTRACTION

SPEEDBIRD AERO WEB
INTERFACE LOGIN

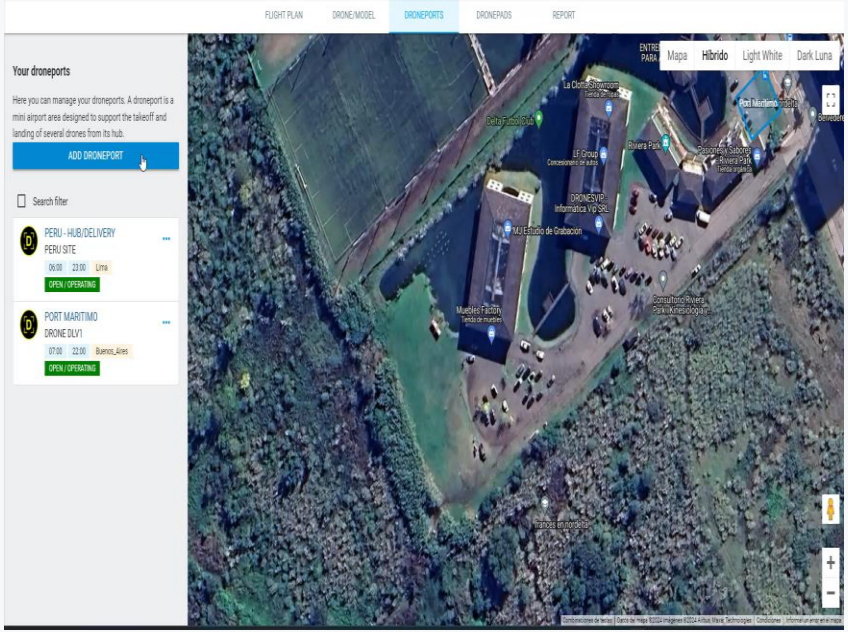
We log in with our assigned username and password



SPEEDBIRD AERO WEB INTERFACE

Creating Droneports and Dronepads

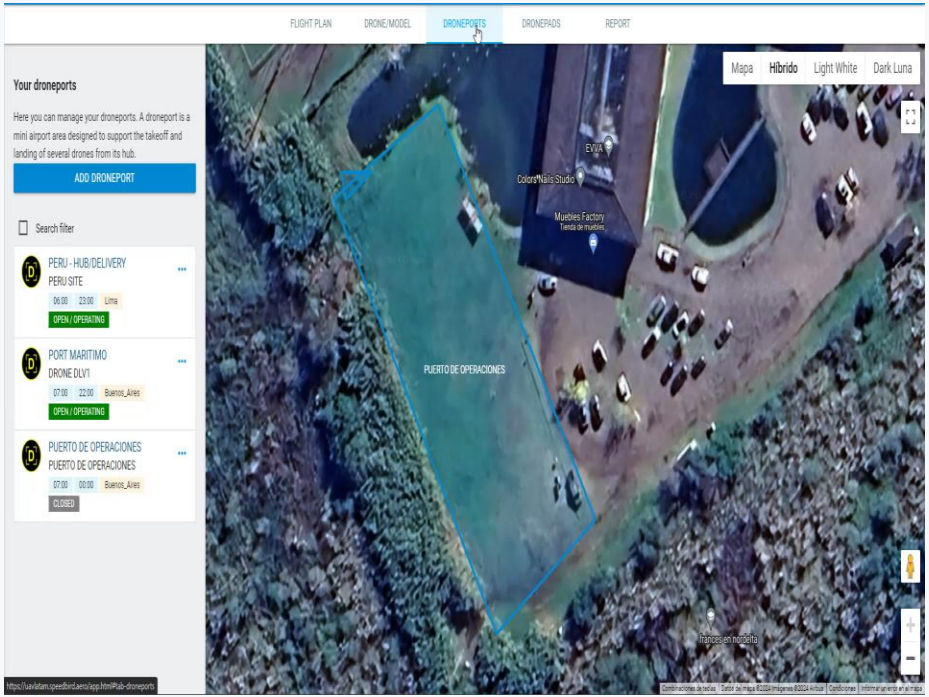
To create the dronepads (UAV landing and take-off points), it is necessary to define the DRONEPORT polygon, which is a no-fly zone for other UTM-enabled drones.



SPEEDBIRD AERO WEB INTERFACE

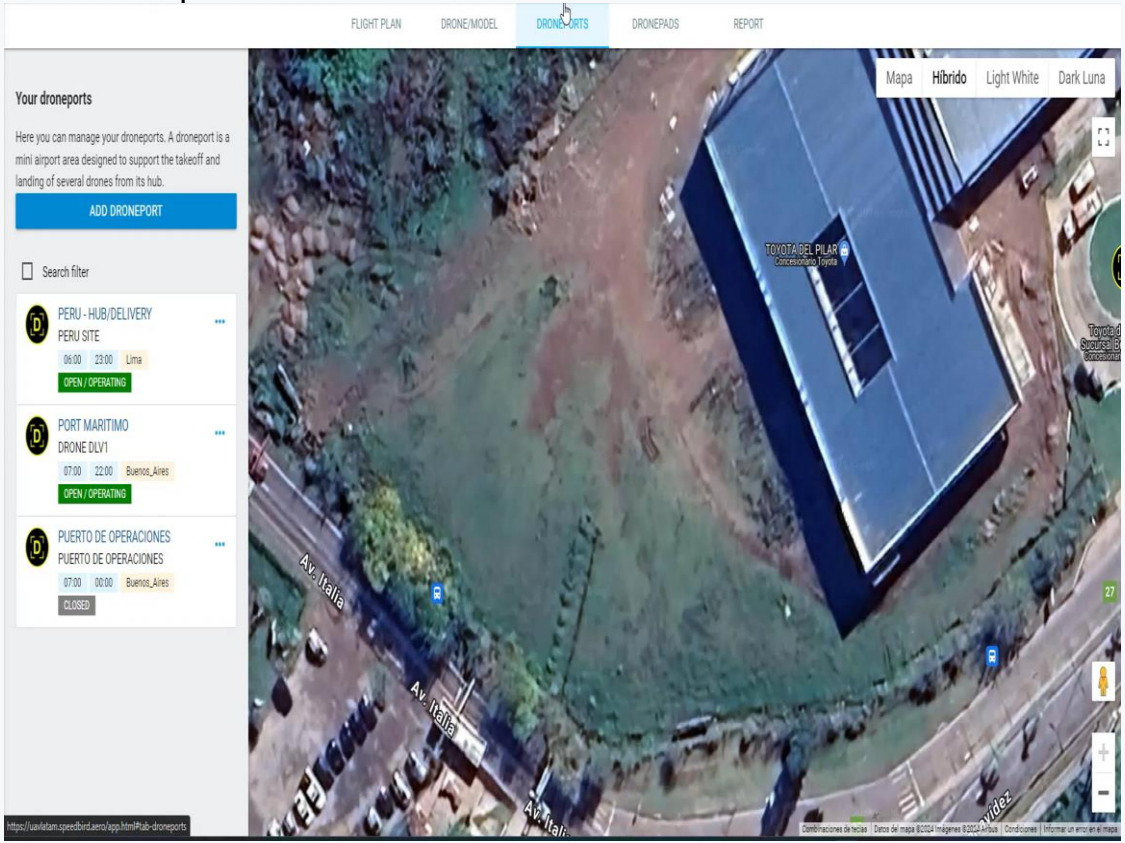
Creating Droneports and Dronepads

Once our drone port has been made, we are going to make our Dronepads that will be the takeoffs and landings of our flight with the coordinates that we extracted from Google maps.



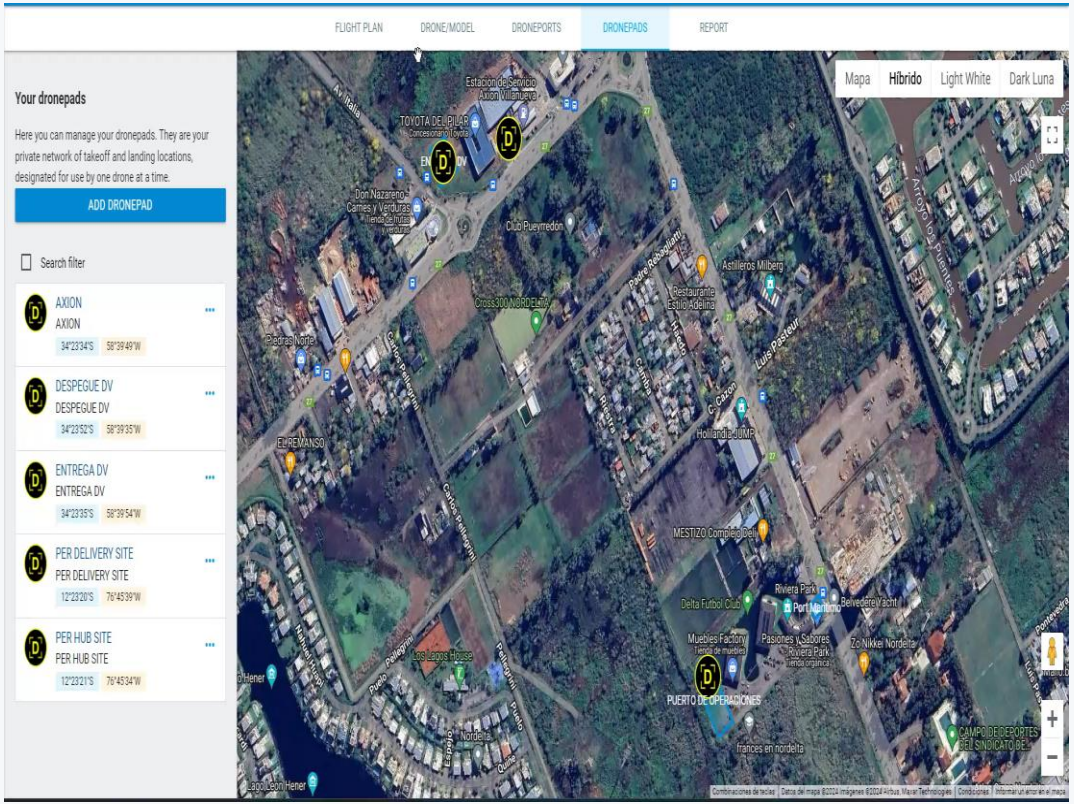
SPEEDBIRD AERO WEB INTERFACE

Creating Droneports and Dronepads



SPEEDBIRD AERO WEB INTERFACE

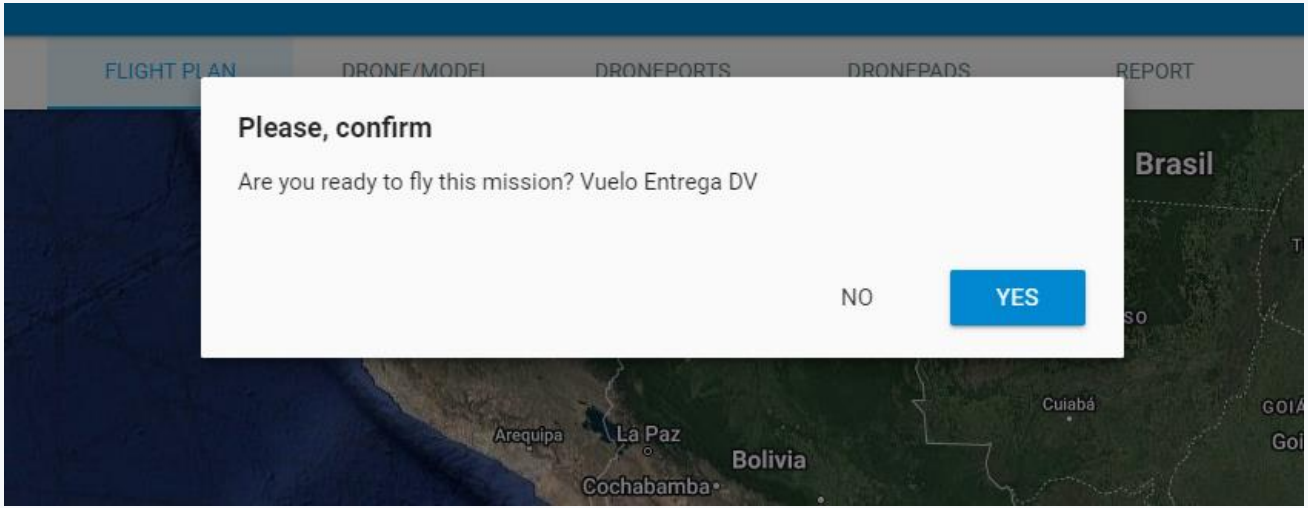
FLIGHT PLANNING



SPEEDBIRD AERO WEB INTERFACE

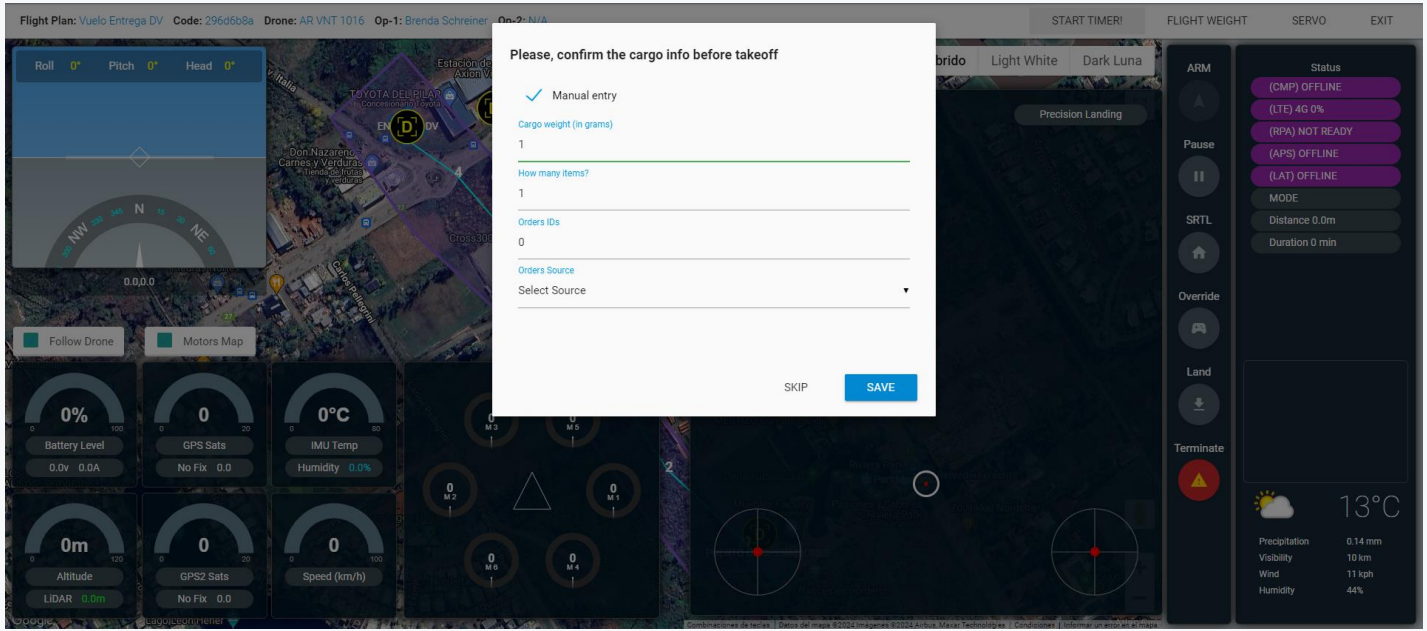
Once the flight plan has been made, we will be able to access to see the dashboard

We apply in "yes" to be able to access the flight command.



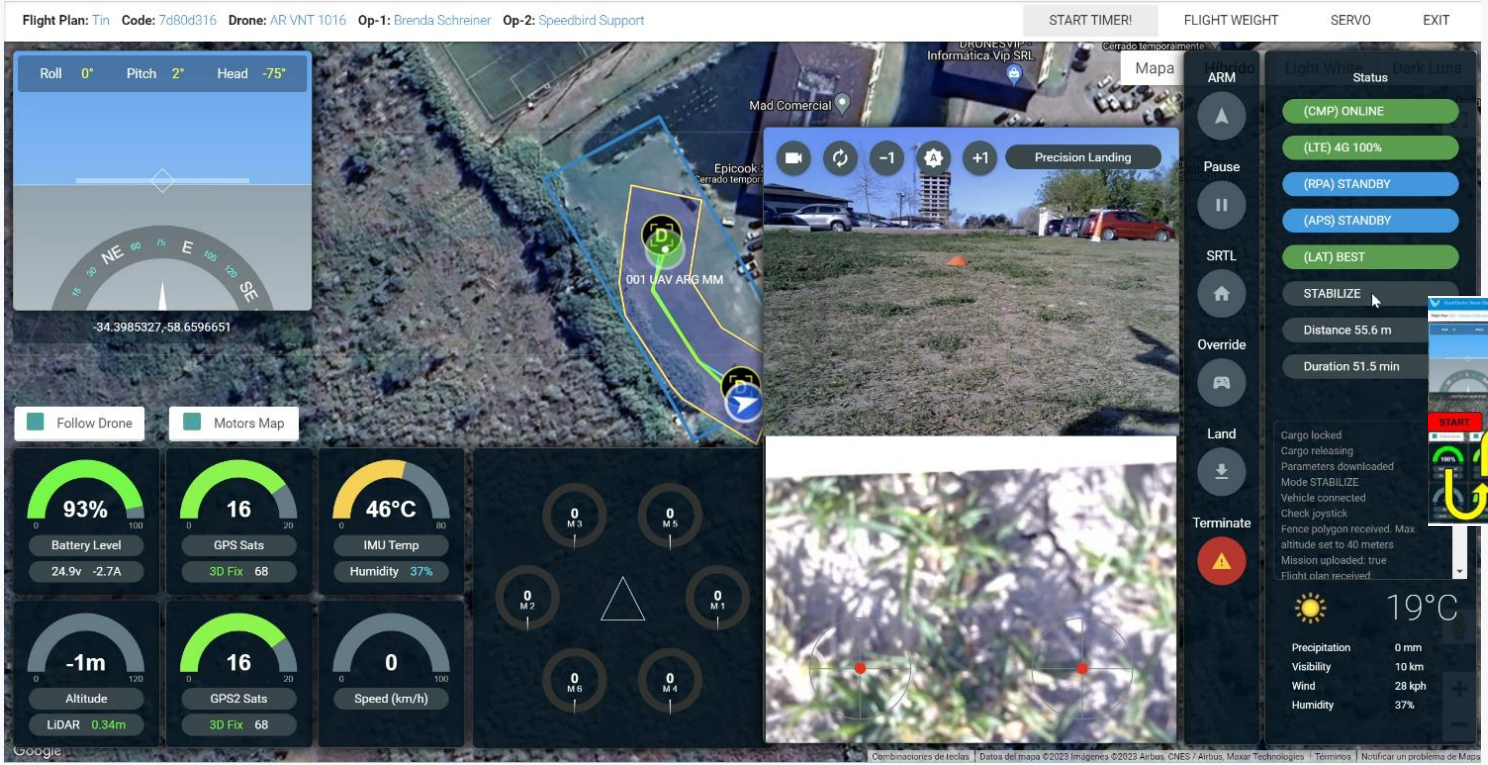
SPEEDBIRD AERO WEB INTERFACE

Load Weight



We will indicate what weight it will carry inside the box, before taking off with our scale and we will indicate how many items we will carry, store and that's it!!

PRE-TAKE-OFF SPEEDBIRD AERO



CHECK FLOW

That is the workflow to talk before flying, always comment on the parameters out loud to be able to check them and be able to arm the drone for takeoff.

PRE-TAKE-OFF SPEEDBIRD AERO

Preview check list and conversation with Binomio

It is important to note that prior to takeoff we must communicate with our binomial in the delivery field.

DRONESVIP — REGISTRO DE SEGURIDAD — CHECK LIST PREVIO AL VUELO — HOJA:

OPERACIÓN:		FECHA:	
OPERADOR:		RESPONSABLE:	
EQUIPO:		N° Serie	

CONDICIONES CLIMÁTICAS

Hora (Local)	
Temperatura (°C)	
Humedad (%)	
Presión Atmosférica (hPa)	
Velocidad del Viento (Km/h)	

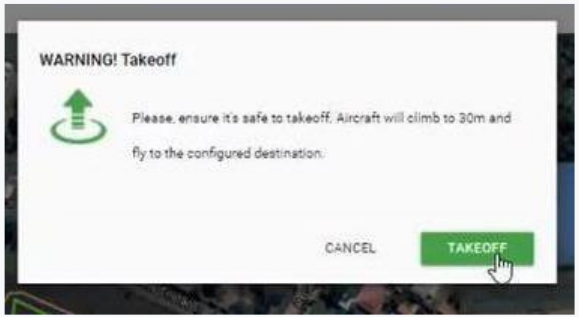
ANTES DE LA OPERACIÓN		SI	NO	N/A
INSPECCIÓN VISUAL DRONE				
INSPECCIÓN VISUAL HÉLICES				
INSPECCIÓN BATERÍAS				
INSPECCIÓN DE MOTORES Y BRAZOS				
INSPECCIÓN ANTENAS	CHEQUEAR antenas GNSS, LTE Y WIFI.			
CONEXIÓN PC				
JOYSTICK				

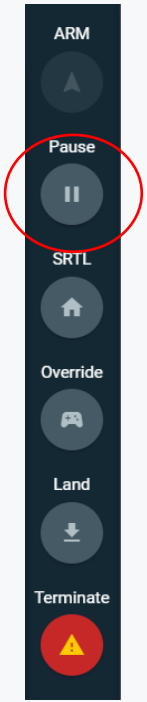
COMUNICACIÓN EN CAMPO	
RESPONSABLES	
P	PILOTO
A	AUXILIAR DE VUELO
O	OBSERVADOR
COMUNICACION EFECTIVA DE OPERADORES - ANTES Y DURANTE EL VUELO	
A	AUTORIZA ENCENDER DRONE
P	AUTORIZADO
A	CABLES CONECTADOS, CHECK PIN DE PARACAIDAS E ILUMINACION, VOLVER A INSERTAR
A	AUTORIZA COLOCAR CARGA?
P	AUTORIZADO
A	CARGA ACOPLADA
P	FLOW RETIRAR PIN DE PARACAIDAS
A	(ESCUCHA SEÑAL SONORA) AFIRMA STANDBY?
P	AFIRMATIVO O NEGATIVO
P	AUTORIZA DESPEGAR?
A	AUTORIZADO O NEGATIVO (CHEQUEAR AREA LIBRE, VELOCIDAD DE VIENTO, PROCEDER)
A	MOTORES FUNCIONANDO (ABORTAR MISION SI NO FUNCIONAN)
A	DESPEGUE NORMAL
A	EN RUTA
COMUNICACION OPERADORES- PUNTO ENTREGA	
O	EN VISUAL
O	VERTICAL DE DRONEPAD
O	ÁREA LIBRE, VELOCIDAD DE VIENTO / PROCEDER ATERRIZAJE
O	EN SUELO
O	ENTREGA REALIZADA
O	DESPEGUE NORMAL
O	GIRANDO SOBRE SU EJE
O	EN RUTA
O	FUERA DE VISUAL
PUNTO DE ORIGEN - POST ENTREGA	
A	TIENE SEÑAL SONORA / AUTORIZA APROXIMACION AL DRONE?
P	AUTORIZADO (O negativo) / COLOCAR PIN DE PARACAIDA Y DESCONECTAR LAS BATERIAS
A	OK
FUERA DEL FLUJO NORMAL	
P	REINICIAR
A	OK
O e A	FRENAR
O e A	GANANDO ALTITUD
O e A	REGRESANDO AL PUNTO DE ORIGEN
O	DRONE SE QUEDA EN EL PUNTO DE ENTREGA
O e A	ABRIR CERVO POR FAVOR
O e A	PAUSA/PAUSE
O e A	RTL/RTL
O e A	TERMINATE / TERMINATE

speedbird .aero

PRE-TAKE-OFF SPEEDBIRD AERO

Once the drone is checked and we have the authorization of the Speedbird remote pilot and we consider that we can take off, before 8 seconds we click on "TAKE OFF", if this does not happen the drone will turn off the engines and we must restart the procedure.

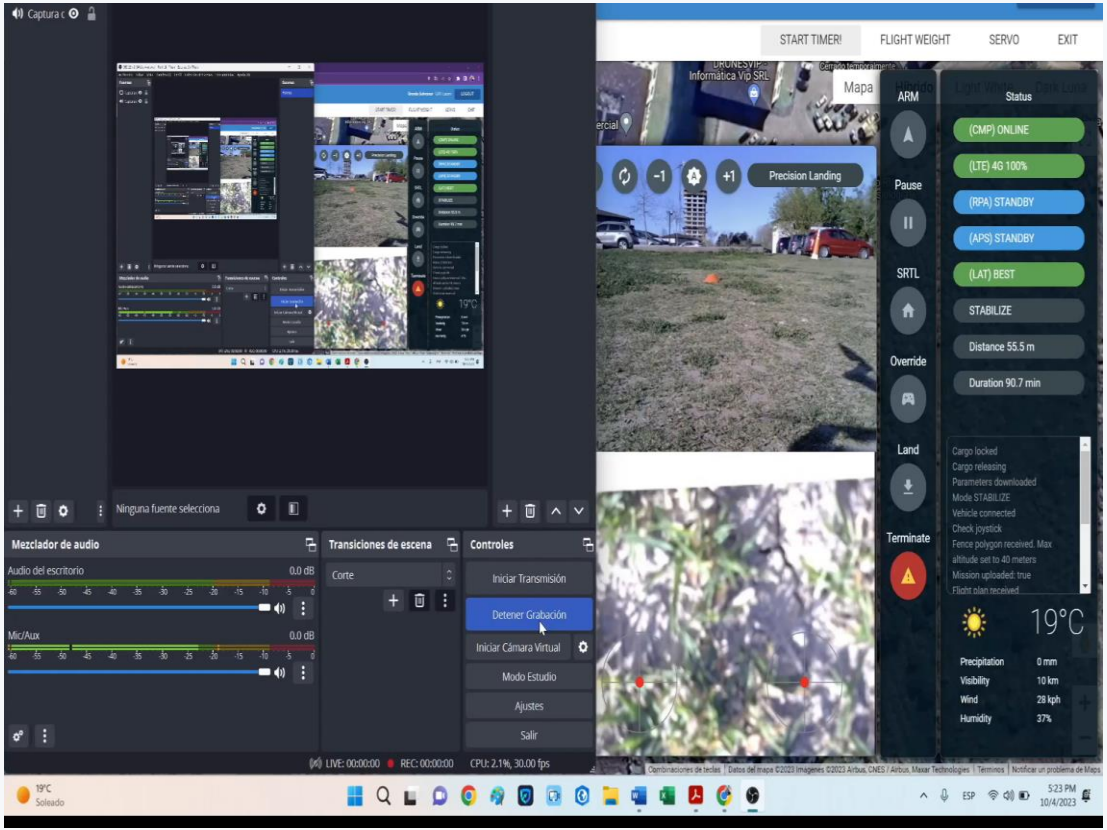




The mouse cursor should always be "PAUSE".

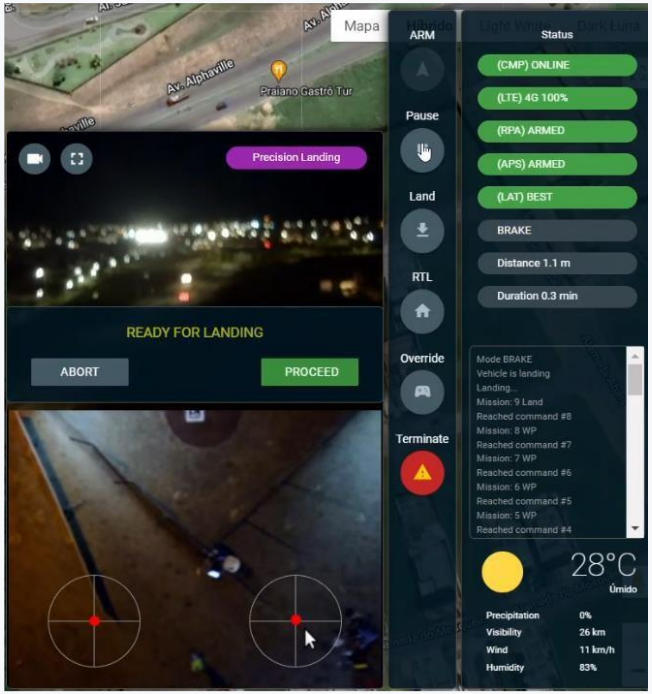
FLIGHT SPEEDBIRD AERO

Comandos de joystick



Always record the flight screen

IN-FLIGHT CONSIDERATIONS



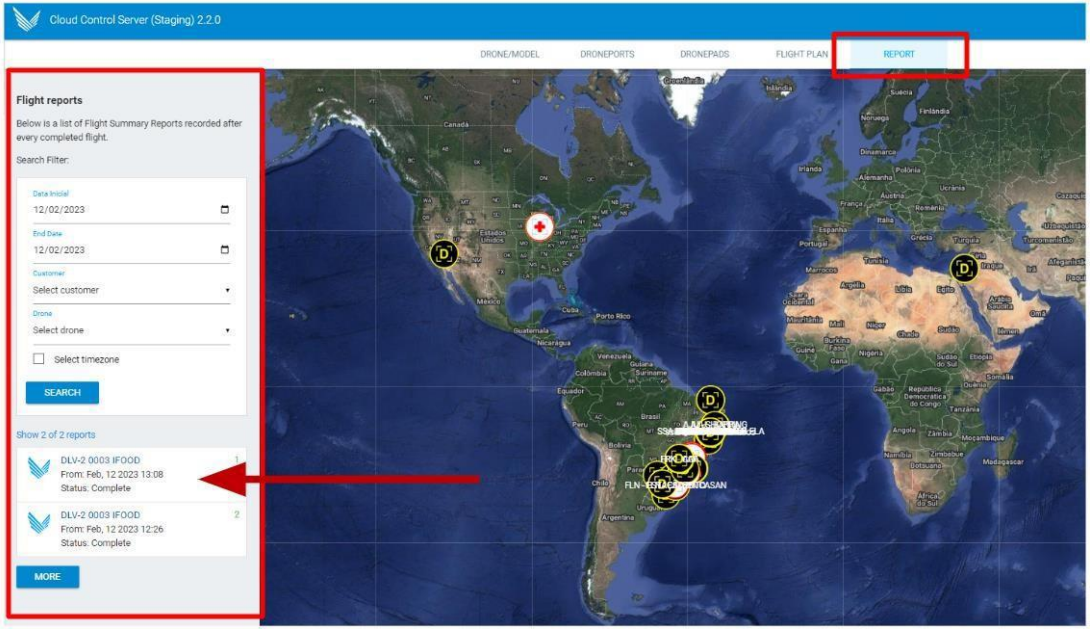
RETURN AND LANDING AT THE ORIGIN

After releasing the cargo at the destination drone platform, the UAV initiates the automatic return to the originating drone platform. The map shows a green checkpoint at the destination point, indicating that the cargo was successfully delivered.

On its return, upon reaching the original drone platform, the UAS begins an operational descent. The remote pilot should always monitor the ground camera to verify the positioning of the UAS descent.

At 25 m above ground level, the message "READY FOR LANDING" appears on the RPS screen, and waits for the pilot's confirmation to proceed with the landing, otherwise, he will go down only leave the load and return to the starting point.

FLIGHT REPORTS



Delivery (Mission)	
Flight Code	1515e152
Origin	RIOMAR DECOLAGEM 1.0
Destination	RIOMAR POUSO
Created	Feb, 12 2023 13:04:42
Takeoff	Feb, 12 2023 13:08:18
Delivered	Feb, 12 2023 13:13:28
Land	Feb, 12 2023 13:18:08
Flight Time	00:09:50
Delivery Time	00:05:10
Payload	3446 g
Payload Items	2

At the end of the mission, the pilot must perform the following procedure:

Report any bugs, if necessary, on the pop-up screen.

Insert the safety pin of the parachute controller.

Disconnect and remove the batteries.

DRONESVIP

QUESTION TIME!

CARGO TRANSPORT

speedbird .aero

DRONESVIP | CIVIL AERONAUTICAL TRAINING CENTER