ACCIDENT

Aircraft Type and Registration: Uvify Ifo

No & Type of Engines: 4 x electric engines

Year of Manufacture: Several (it was a swarm of vehicles)

Date & Time (UTC): 16 May 2023 at 1510 hrs

Location: Norton St Phillip, Bath

Type of Flight: Training

Persons on Board: Crew - None Passengers - None

Injuries: Crew - N/A Passengers - N/A

Nature of Damage: Significant damage to two UAs

Commander's Licence: Permission for Commercial Operations (PfCO)

Commander's Age: 36 years

Commander's Flying Experience: 34 hours (of which 32 were on type)

Last 90 days – 3 hours Last 28 days – 1 hour

Information Source: Aircraft Accident Report Form submitted by the

pilot

A swarm of 638 UAs took off as part of a planned test of a light display. The preprogramed launch and animation flight were completed without incident. As the UAs switched to 'RETURN TO HOME' mode they returned to their grid positions. Several UAs then flew out of formation, before the pilot sent an emergency hold command to which the fleet responded, and all UAs held their position. A manual 'RETURN TO HOME' command was sent and the UAs returned to their grid formation. When the swarm began to descend the same UAs again flew out of formation. The swarm was then landed in altitude order, due to concerns about battery endurance. All UAs stayed within the planned geofence. Three UAs sustained broken arms and there were several chipped propellers.

An investigation by the operator determined that deviations from the planned flight route were caused by flat batteries in the controller unit, which had been left switched on when stored. The operator has introduced a new procedure to remove all controller batteries when not in use.