

# Q1 / 2023

Shareholder Letter



# Dear Vertical Aerospace Shareholders

The last few years have been transformative in the eVTOL landscape with flight tests, certification progress and capital investment. We have moved from asking whether electric aviation will be a reality to how and when. However, certification remains a key point of potential divergence between peers, so we would like to set out how we view the VX4's certification journey, and our recent developments to achieve this.

## Certification Update

Vertical has been flying full-scale prototypes since 2018, learning from our single-seat four-ducted fan VX1 in 2018 to the larger two-seat, twelve propeller VX2 which flew in 2019. Since 2021, we have been on our certification journey with the vectored thrust, four passenger, piloted VX4 that we will take through to Type Certification.

We are immensely proud of the progress we have achieved with the VX4, particularly towards the end of 2022 receiving our Permit to Fly from the UK's Civil Aviation Authority (CAA). Our Permit to Fly is a compliance demonstration in itself and a requirement from the CAA in order to fly our tethered airborne tests.

Receiving in March 2023 our Design Organisation Approval (DOA) from the CAA was a huge milestone in our certification journey. As the first listed eVTOL manufacturer to receive a DOA, it sets the foundation of our certification efforts as it demonstrates our engineering competence – underlining our home regulator's confidence in our capabilities. With our major partner network of aerospace suppliers finalised and the second phase of our flight test programme about to get underway, we are in a great position to have a strong 2023.

We remain in close dialogue with four different regulators in the UK, Europe, US and Japan, with different territorial interests and differing regimes, where we will launch the VX4. We continue to encourage further regulatory harmonisation across major markets to enable eVTOLs internationally to fly smoothly in all territories.

Vertical is primarily working with the UK CAA on certification, and we are fortunate to have an ambitious and agile home regulator engaged with us. We are also concurrently certifying with the European Union Aviation Safety Agency (EASA) to permit the VX4 to fly across Europe.

In 2019, EASA published SC-VTOL as the certification basis for eVTOLs certifying in Europe, with the CAA adopting these rules in June 2022. While we apply both new and already proven technology to these novel electric aircraft, we do have a rulebook to follow that sets the highest standards of safety – the same as large transport category aeroplanes. We believe this is necessary to win the trust of passengers, proving that these aircraft meet the maximum levels of aerospace safety. Designing for these high standards will also facilitate compliance with the envelope of all national requirements.

Our approach to certification and our corresponding flight tests have been measured and steady. At Vertical, we believe that flying piloted full-scale demonstrators from the beginning of the certification journey maximises learnings which will pave the way for a final optimised certification-ready aircraft. This might mean that our prototyping and flight tests need a greater time investment now, but we believe this will pay off when it comes to certifying the VX4.

We see the steps for the VX4 reaching Type Certification, with the CAA, as:

Step	What it means
1 Develop Standard	Regulator writes rules – EASA publishes SC-VTOL & Acceptable Means of Compliance July 2019
2 Regulator Confirms Standards	Regulator sets rules – CAA adopted SC-VTOL June 2022
3 Basis of Certification	Regulations and standards the VX4 will meet – submitted Jan 2023, to be agreed by CAA and issued in CRI A-01
4 Confirm Capability	Organisation Competence, Design Assurance & Procedures – DOA received March 2023
5 Technical Familiarisation	Joint groups with the CAA
6 Means of Compliance & Test Plan	Means of Compliance added to CRI A-01 Appendix and defined certification plan agreed with the CAA
7 Compliance Demonstrations & Testing	Conducting the structural, systems & flights tests in the defined certification plan
8 Type Certification	Final Step – Technical closure with the CAA

These steps will be mirrored by our validation programmes with other national aviation authorities where Vertical's customers will operate, including the Federal Aviation Administration (FAA) and Japan Civil Aviation Bureau (JCAB), as well as the project familiarisation workshops with regulators in key territories including Brazil and Singapore. We expect that our foreign validation efforts will be an efficient process after our initial UK Type Certification with the CAA and concurrent validation with EASA.

We have continued to leverage the expertise and foundational capabilities of our world-class strategic suppliers and synchronise our certification programme with Honeywell, Leonardo, GKN, Rolls-Royce, Mollicel and Solvay. And with a strengthened executive team onboard with Eduardo Dominguez Puerta, formerly our Chief Commercial Officer moving to Chief Operating Officer and working closely with David King as Chief Engineer, we have completed our comprehensive review of the timeline for taking the VX4 through to Type Certification.

Our previous guidance had been 2025, which was based on our best estimates at the time. Attempting to predict a date with certainty when it is several years away is challenging and achieving it depends on agreeing compliance methods for new technology with the authorities. For instance, as we begin to consider our Means of Compliance with the CAA, we will work through factors out of our control, such as the testing it requires for this technology. We believe the industry as a whole will experience some timeline corrections and we are already seeing signs of peers acknowledging this.

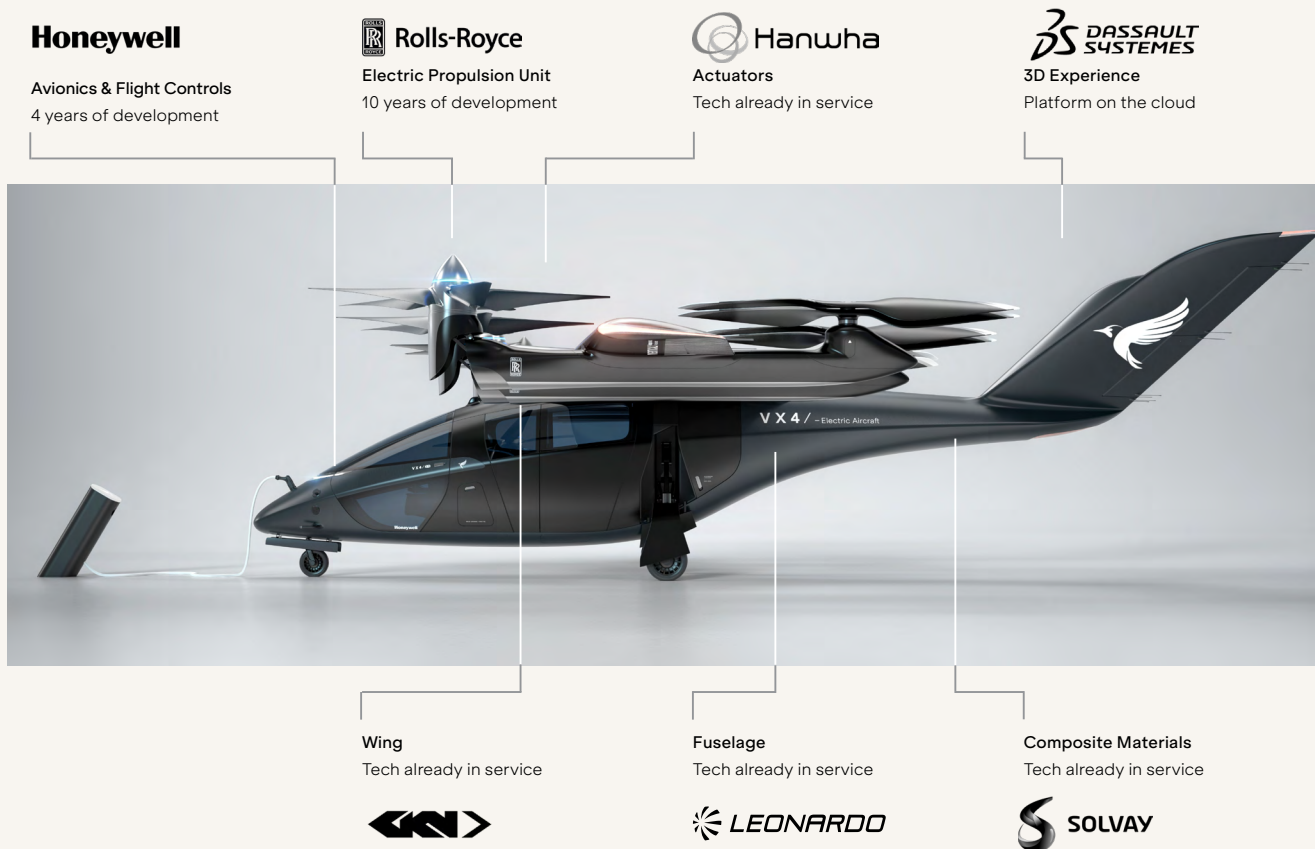
In light of our learnings and after completing our review, we are now targeting certification by the end of 2026. We believe this will make us one of the first movers in the eVTOL market and we continue to work closely, in our Joint Working Groups, with our broad customer base to understand how they will operate the VX4 in their markets.

# It Takes A Village

Our differentiated business model as a pure-play manufacturer, supported by tier-one aerospace partners, has delivered clear efficiencies. Lower spend, relative to peers, equated to a net loss of £23m in Q1 in line with the guidance shared in our last letter.

As we evolve our industrial strategy from 2024, we are transitioning our Board to reflect this evolution, with Mike Flewitt succeeding Dómhnaí Slattery as chairperson.

Personally, as CEO, I would like to thank Dómhnaí for his counsel as chairperson supporting Vertical's overall strategy, expanding our commercial model and establishing our governance frameworks as a newly public company. As we transition through 2023 to Mike Flewitt becoming chairperson, I look forward to continuing to work closely with Dómhnaí on Vertical's fundraising this year and with Mike on our industrial strategy.





Vertical employee at the Vertical Flight Test Centre

## Testing Progress

We look forward to updating our shareholders with the progress we will make in the coming months across our testing campaign, including systems and structural. We expect to expand the flight test envelope, conducting thrustborne and further piloted flight tests. We are also delighted to be progressing the build of our second demonstrator aircraft which will integrate most of our certification partners into this new prototype VX4 – including Leonardo, GKN, Solvay, Honeywell and using Vertical's proprietary battery packs using Molicel's cells.



**Stephen Fitzpatrick**  
Founder & CEO

*S Fitzpatrick*



**Dómhnaí Slattery**  
Chairperson

*D Slattery*

# Certification Progress

## The first ever DOA issued to a listed eVTOL OEM

We have secured the first ever DOA issued to a listed eVTOL manufacturer, and the first ever issued to an eVTOL manufacturer by the UK CAA.

This approval means the CAA is satisfied that Vertical has the capability to design a safe and reliable aircraft and aviation-related products to the highest standards and emphasises the regulator's confidence in Vertical as a credible aerospace company.

UK and European aerospace companies cannot hold a Type Certificate without being granted a DOA.

The DOA authorises Vertical to conduct design activities and issue design approvals within the DOA's scope of approval. As an approved Design Organisation, we will have increasing authority and privileges as we progress through the design and certification programme of the VX4.

The process for achieving DOA involved a rigorous assessment of our procedures, quality management system, the competence of our technical workforce, and the necessary facilities and equipment to support the design activities to certify the VX4 aircraft.

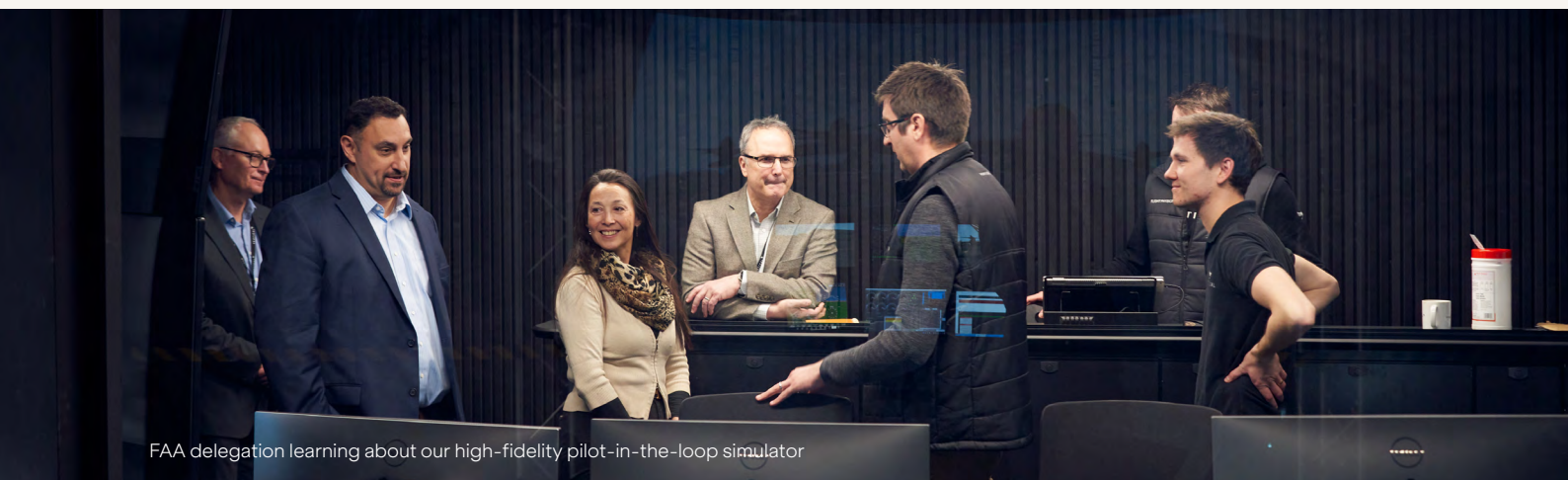
Left: Rob Bishton, Interim Co-CEO, CAA with Stephen Fitzpatrick | Right: Lirio Liu, Certification Director, FAA reviewing Vertical's second generation propellers | Bottom: CAA meeting in the VX4 mock-up



# Working With Four Aviation Regulators

As we have also recently announced, we have been successful in our application to JCAB to have the VX4 Type Certification validated in Japan. This marks the formal commencement of Vertical's certification efforts in Japan, with successful completion allowing for the VX4 to be operated in this key market.

Vertical has now formally commenced our certification journey with four aviation regulators in the UK, Europe, USA and Japan. The establishment of this broad coalition of regulators enables us to learn the similarities and divergences in approach between regulators to deliver the VX4 into service internationally, with our airline, helicopter operator, aircraft lessor, business aviation and tourism group customers.



FAA delegation learning about our high-fidelity pilot-in-the-loop simulator

We continue to strengthen our regulatory relationships, and, in April, we were privileged to host senior delegations from two of our core regulators – the CAA and the FAA.

Rob Bishton, the CAA's Interim Co-Chief Executive, visited our Bristol HQ along with the CAA's Chief Surveyor, Stuart Algar, and Garry Lathey, the head of the Design and Certification team. The CAA toured the facility, where they were able to fly in our VX4 simulator, learn more about our technology, and get an update on our flight test and certification programmes.

We also hosted senior colleagues from the FAA, including Lirio Liu, the FAA's Executive Director of Aircraft Certification Service, who spent a full day

at our three core facilities: our Bristol HQ; the Vertical Energy Centre and our Flight Test Centre at Cotswold Airport, learning about the VX4 and our plans for US validation.

Lirio and her team will ultimately be responsible for validating the UK CAA's type certification of the VX4 for use by our American customers, including American Airlines and Bristow. We walked the FAA team through the maturity of our processes and how we are tackling our technology challenges.

These visits are critical in building the right relationships to support a smoother certification and validation process. We will be undertaking technical familiarisations with both regulators in the coming months.

# Prototyping & Testing

## Building the Second Prototype VX4

There is no template to launching an eVTOL. However, we're learning from previous successful aircraft programmes. This is why we built our first full-scale prototype to accelerate and de-risk the completion of the final design and configuration of our certification aircraft. We also believe the ability to fly full-scale and piloted is crucial to demonstrate to regulators our certification progress, which is why we have chosen to pursue this early on in our flight test programme.

We took our first VX4 demonstrator airborne last year and it will be entering the second phase of its flight test programme shortly. However, to expedite our flight test learning we are, in parallel, building a second prototype aircraft which will again both be full-scale and have a pilot on board. It is also a great opportunity to incorporate further performance and maturity developments into our flying prototypes and work closely with some of our key certification partners through an aircraft design-build-test cycle.

Our second aircraft is currently being manufactured. Our fuselage, manufactured by our certification partner Leonardo, has been built in Southern Italy (pictured to the right) and this second demonstrator will leverage most of our tier-one aerospace partners more, including:

- Honeywell – avionics and flight controls
- Solvay – composites
- Molicel – cells
- GKN – EWIS
- Leonardo – fuselage

It will also incorporate more of our in-house technology including our proprietary battery packs made at the Vertical Energy Centre, using Molicel cells, and our second generation propellers, developed from the five years of in-house research, wind tunnel and single rotor rig testing.

By incorporating these new technologies, building on the learning we've gained from our first prototype and leveraging the experience of some of our key certification partners, we expect our second prototype to accelerate our flight test programme and provide further valuable data and experience that we can employ as we design, build and test our certification aircraft.



Fuselage manufacture at Leonardo's facilities



# Go To Market

Supply Chain Partner  
Summit at our Bristol HQ

## Launch of the Supply Chain Partner Community

In March, we invited all of our tier-one aerospace partners to Bristol to launch our Supply Chain Partner Community.

Honeywell, Solvay, Hanwha, Leonardo, GKN and Rolls-Royce were all represented spending the day discussing how to collaborate effectively and improve communication and transparency between Vertical and our suppliers.

Whilst many of these suppliers are already feeding in to our second demonstrator VX4, by engaging robustly with our suppliers for our certification aircraft now, we are aiming to lay the groundwork to ensure a smooth build in the coming years.

Following on from the launch, together with these partners, we are: developing new ways to unlock further our suppliers' significant experience, particularly around certification; ensuring we are delivering the right level of requirements and detail to them to ensure appropriate speed of development, as well as co-locating our joint activities early on in the programme.

Due to the rapid nature of the evolution of the VX4, our partners recognise that they need to engage differently and more deeply with Vertical than with a convention OEM and by having all parties in the same space we can jointly agree and propose new approaches to collaboration.

# Q1 Financial Update

Our partnership approach, as expected, is allowing for a controlled capital spend and ensuring we remain a lean and efficient organisation – as exemplified by Leonardo building our second prototype's fuselage.

Following the continued investment in our newly launched battery facility, the Vertical Energy Centre, in addition to our design and certification capabilities to support our newly received DOA, our net operating loss for the three months ended March 31, 2023 is £23m. Our capital plan for 2023 remains on track and this loss fits within our current guidance for the year.

As of the end of this first quarter, we have cash and cash equivalents totalling £104m, which will be invested in the development of the company's test and certification activities and in the people, systems and processes that support the company. We expect this existing funding will be sufficient to achieve our goals throughout 2023 and into 2024.

Net cash outflows incurred in the second quarter will be in relation to the advancement of our airborne flight test programme and further investment in our second full-scale prototype aircraft.

As previously announced to support our ongoing capital requirements, fund our future operations and remain as a going concern, Vertical intends to undertake a fundraising in 2023 to raise additional capital. We are progressing on this front and believe we will be in a position to raise funds during this year.

The business plan has been updated to reflect the revised timetable to certification. We continue to expect strong demand and very attractive economics from the sale of aircraft.

## Vertical's Attendance at Upcoming Conferences

### Cowen Transport Conference

London  
May 11, 2023

### Morgan Stanley eVTOL/Urban Air Mobility Summit

NYC  
June 7, 2023

## Forward-Looking Statements

This letter contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Any express or implied statements contained in this letter that are not statements of historical fact may be deemed to be forward-looking statements, including, without limitation, statements regarding the certification and the commercialization of the VX4 and related timelines, expectations surrounding pre-orders and commitments, Vertical's differential strategy compared to its peer group, the features and capabilities of the VX4, the transition towards a net-zero emissions economy, the sufficiency of Vertical's cash and cash equivalents to fund operations, expected financial performance and operational performance for the fiscal year ending December 31, 2022, as well as statements that include the words "expect," "intend," "plan," "believe," "project," "forecast," "estimate," "may," "should," "anticipate," "will," "aim," "potential," "continue," "are likely to" and similar statements of a future or forward-looking nature. Forward-looking statements are neither promises nor guarantees, but involve known and unknown risks and uncertainties that could cause actual results to differ materially from those projected, including, without limitation: Vertical's limited operating history without manufactured non-prototype aircraft or completed eVTOL aircraft customer order; Vertical's history of losses and the expectation to incur significant expenses and continuing losses for the foreseeable future; the market for eVTOL aircraft being in a relatively early stage; the potential inability of Vertical to produce or launch aircraft in the volumes and on timelines projected; the potential inability of Vertical to obtain the necessary certifications on the timelines projected; any accidents or incidents involving eVTOL aircraft could harm Vertical's business; Vertical's dependence on partners and suppliers for the components in its aircraft and for operational needs; the potential that certain of Vertical's strategic partnerships may not materialize into long-term partnership arrangements; all of the pre-orders Vertical has received for its aircraft are not legally binding, conditional and may be terminated without penalty at any time by either party, and if these orders are cancelled, modified, delayed or not placed in accordance with the terms agreed with each party, Vertical's business, results of operations, liquidity and cash flow will be materially adversely affected; any potential failure by Vertical to effectively manage its growth; the impact of COVID-19 on Vertical's business; Vertical has identified material weaknesses in its internal controls over financial reporting and may be unable to remediate the material weaknesses; Vertical's dependence on our senior management team and other highly skilled personnel; as a foreign private issuer Vertical follows certain home country corporate governance rules, is not subject to U.S. proxy rules and is subject to Exchange Act reporting obligations that, to some extent, are more lenient and less frequent than those of a U.S. domestic public company; and the other important factors discussed under the caption "Risk Factors" in our Annual Report on Form 20-F filed with the U.S. Securities and Exchange Commission ("SEC") on April 29, 2022, as such factors may be updated from time to time in Vertical's other filings with the SEC. Any forward-looking statements contained in this letter speak only as of the date hereof and accordingly undue reliance should not be placed on such statements. Vertical disclaims any obligation or undertaking to update or revise any forward-looking statements contained in this letter, whether as a result of new information, future events or otherwise, other than to the extent required by applicable law.