

## Westcott Incubator and Accelerator (WIA)

# Application Proposal Pack



Company Name:

## Hybrock Ltd

Selection Panel Date

17<sup>th</sup> May 2023

Supported by:











## Contents

Con	tents2
1.	Executive Summary3
2.	Business Information4
2	1 Contact Information4
2	1 Business Information4
3.	Company Summary5
4.	WIA Programme Specification5
5.	Problem Statement6
6.	Solution / Value Proposition6
7.	Market7
8.	Team10
9.	Funding11
10.	Future Roadmap11
11.	Westcott Incubator and Accelerator Programme specific questions12
1	1.1 Incubator programme
12.	Impact
13.	Location15
14.	Terms & Conditions16
15.	Financial Checks Summary16









## 1. Executive Summary

This should aim to cover the following points:

- (a) Company summary
- (b) Reason for inception/ Problem
- (c) Value proposition/ Solution
- (d) Technology (Support from technical expert)
- (e) Market
- (f) Commercialisation strategy/ Business model
- (g) Funding received till date and its impact
- (h) Why WIA programme/ Impact of WIA on the business
- (i) Funding streams to fund the programme (Accelerator only)
- (j) Roadmap for business and technology following WIA
- (k) Monetary ask from the panel
- (I) Impact of WIA project in Westcott Space Cluster and Buckinghamshire

Hybrock is a British aerospace engineering company, setting out to provide fully integrated space logistics services to deliver small satellites and payloads into Low Earth Orbit (LEO) via the design and manufacture of high-tech, reliable, cost-effective rockets, and a complete on-demand service.

The space launcher sector is currently dominated by heavy-lift vehicles. Access to space for small payloads (sub 500 kg) currently relies on the concept of "rideshare" where the small satellite is carried as a secondary payload on the launch of a larger primary payload. Whilst this provides apparent cost savings, there are a number of significant drawbacks, mainly the dependency on the schedule and target orbit of the primary payload.

Our value proposition is to provide real-time delivery of payload to orbit through a one-stop-shop for small satellite launches, offering end-to-end solutions including logistics, launch, and orbit placement operations. For operators who need to get their small-satellite or other payload into LEO safely, reliably and cost effectively, Hybrock's next generation launch vehicle uses sustainable hybrid modular propulsion technology that reduces costs, complexity and time-to-launch, while enabling a tailored launch window, precise orbital delivery, while taking care of all other aspects of the logistical journey. By leveraging our expertise, technology and partnerships, we aim to make smallsat launches more affordable, accessible, and reliable. We will strive to be considered as the FedEx or Maersk of the space industry.









## 2. Business Information

#### 2.1 Contact Information

Company/ organisation name Hybrock Ltd

Point of contact name Thomas Ollier

Job role CEO/ Founder

Contact email thomas.ollier@hybrock.space

Contact number 07810867979

#### 2.1 Business Information

Registered website address www.hybrock.space

Registered office address Greenfields, College Road, Ardingly, West Sussex, RH17 6SA

Size of the enterprise Micro Enterprise

No of employees 5

Trading status Limited Company

Date of company registration 21/12/2021

Company registration number 13812424

Registered VAT Number N/A (<£85k threshold)

Last year turnover N/A









# 3. Company Summary

*Please give a general summary of your business. You can include details such as the reason for inception, problem statement, discovery of a gap in the market, technology, and future plans.* 

Hybrock is a British aerospace engineering company, setting out to provide fully integrated space logistics services to deliver small satellites and payloads into Low Earth Orbit (LEO) via the design and manufacture of high-tech, reliable, cost-effective rockets, and a complete on-demand service.

The space launcher sector is currently dominated by heavy-lift vehicles. Access to space for small payloads (sub 500 kg) currently relies on the concept of "rideshare" where the small satellite is carried as a secondary payload on the launch of a larger primary payload. Whilst this provides apparent cost savings, there are a number of significant drawbacks, mainly the dependency on the schedule and target orbit of the primary payload.

Our value proposition is to provide real-time delivery of payload to orbit through a one-stop-shop for small satellite launches, offering end-to-end solutions including logistics, launch, and orbit placement operations. For operators who need to get their small-satellite or other payload into LEO safely, reliably and cost effectively, Hybrock's next generation launch vehicle uses sustainable hybrid modular propulsion technology that reduces costs, complexity and time-to-launch, while enabling a tailored launch window, precise orbital delivery, while taking care of all other aspects of the logistical journey. By leveraging our expertise, technology and partnerships, we aim to make smallsat launches more affordable, accessible, and reliable. We will strive to be considered as the FedEx or Maersk of the space industry.

# 4. WIA Programme Specification

Which WIA programme is being applied for?

Incubator









## 5. Problem Statement

Describe the problem that you are trying to solve. Why is this such a big problem? How did you discover this problem? Can you quantify the problem in terms of number of people that it is affecting and/or monetary value?

Hybrock is aiming to solve the problem of launch provision, principally for the UK small satellite market in the first instance, but ultimately being part of the global space industry. We are the solution to a problem that the current market cannot solve, as the use of megasatellite constellations and commercial small-satellites continues to grow, the space industry is projected to reach \$1 trillion by 2040, with a compound annual growth rate (CAGR) of 10.6%.

However, the capacity to meet this demand simply does not exist, and heavy-lift launchers are not suitable for the needs of small satellite customers; the current "go to" solution is rideshare which is a compromised solution. It requires compromise on schedules, capacity and delivery orbit. Further, the current market forecasts provided by the likes of Frost & Sullivan indicate that by 2030 global rideshare will only have enough total capacity to service 35% of expected demand - the 65% opportunity gap to be filled by dedicated small-sat launch service providers. Added to this there is little evidence that prospective launch providers (our would-be competitors) are developing reliable enough solutions to provide assured launch.

# 6. Solution / Value Proposition

Describe your solution to this problem.

We are plugging this capacity and service solution gap by developing our own patent pending hybrid propulsion system and an innovative modular rocket that will revolutionise the space logistics industry. By manufacturing and incorporating our propulsion system into our rockets, we will be able to provide real-time, end-to-end launch services from the UK's new spaceports.

Hybrock will provide a complete logistics solution centred around a proprietary launch vehicle. This vehicle will utilise safe and reliable hybrid rocket motors, and be developed by leveraging the advantages of machine-learning and digital twin technology. A modular design approach will allow for a further reduction of risks and costs, as well as for a customisation of the launcher in order to tailor it to the customer's requests.

We propose to augment the actual launch vehicle element by providing the full site of necessary and required services, from licence acquisition to spaceport liaison. Essentially, we will take care of everything associated with getting customers' small-satellites into orbit.

What is your core value proposition?

Hybrock solves the problem of disjointed, unreliable and expensive launch provision for organisations who want assured delivery of their small satellites and payloads to orbit.

Describe the technology/ service/ offer that solves the problem.











We provide a fully integrated, end-to-end launch service by exploiting sustainable hybrid modular propulsion technology that reduces costs, complexity and time-to-launch, whilst enabling a tailored launch window and precise orbital delivery. Hybrock is the UK's first hybrid rocket company. After being side-lined for decades, years of research and technological advances are now pushing the hybrid engine (i.e. liquid oxidiser and solid fuel) to the forefront of launcher development. We are capitalising on their inherent safety, simplicity and reliability.

Describe any unfair advantages that your solution offers that is currently not available in the market (novel IP, links with academics and research programmes, etc)

Our launch vehicle will be centred around modular hybrid rocket motors. These are safer and more reliable than liquid-fuel rockets, more controllable than solid rockets (i.e. throttleable to optimise thrust in real-time), and give higher performance than monoprop rockets. The safety and reliability will enable assured launch; the controllability will provide precision in orbital delivery; the modularity will allow for cost and risk reduction.

We aim to be the world's first net-zero rocket company. We have chosen to use recycled waste plastic, reprocessed as HDPE, as our inert solid component, and hydrogen peroxide, produced using renewable energy, as our non-toxic and storable oxidiser. The absence of cryogenic or toxic propellants, makes the motor sustainable and flexible for launch windows.

Hybrock's utilisation of machine learning and digital twins to develop our launch vehicle will both streamline the design process as well as ensuring the reliability of our vehicles and mission execution.

Hybrock intends to implement a low carbon strategy, through development, deployment and sustainment of its end to end launch delivery service. Part of this is to develop novel approaches to on-board batteries, by using the solid fuel element of stages 2 and 3 as capacitors to provide electricity to the oxidiser pumps of stages 1 and 2.

## 7. Market

Please give a realistic overview of your target market(s)

Hybrock's target market is the small (sub 500kg) and cube satellite manufacturers and operators intent on reaching low earth orbit, in the 2028/29 timeframe and onwards.

The space economy will experience exponential growth in the next 10 years thanks to the deployment of mega satellite constellations. Projections result in a 1 trillion USD economy by 2040. Growth is forecasted to be 3X within a decade with a compound annual growth rate (CAGR) of 10.6%.

The UK small satellite (<500kg payload mass) launch market is poised for significant growth over the next decade. Industry experts predict that the market for small satellite launch services in the UK will grow with a CAGR of over 20% between 2021 and 2030.

This growth is driven by a number of factors, including increasing demand for satellite-based services, favourable government policies, and advancements in technology. As the demand for small









satellites continues to grow, more and more organisations will turn to small satellite launch services as a cost-effective way to get their payloads into orbit.

In addition to the growing demand for small satellite launch services, the UK government has taken steps to support the growth of the industry. This includes the commitment of over £465 million to support the development of the UK's small satellite industry, and the creation of a dedicated small satellite launch site in Scotland.

The UK's aerospace industry is well-positioned to benefit from the growth of the small satellite market. With a highly skilled workforce and cutting-edge technology, the UK is well equipped to capture a significant share of the growing market for small satellite launch services.

In conclusion, the UK small satellite launch market is poised for significant growth over the next decade. With favourable market conditions, strong governmental support, and a well-established aerospace industry, the UK is poised to lead the way in this exciting and rapidly growing market.

Please outline what you know of your total market size and within that the portion you intend to target – You can include your Total Addressable Market, Serviceable Available Market and Serviceable Obtainable Market, specific demographics/geographic regions, etc.

The UK market is estimated to grow to 124 launches per year by 2035. Hybrock intends to be launching commercially by 2028/29 and aims to grow steadily to capture and secure 20% of the UK market through the following 6 years. We conservatively estimate that this will equate to a revenue of circa £221M.

What do you consider are the barriers to entry in your market? How do you believe these barriers might be overcome? – Consider points such as licenses, competition, cost of business, investments required, etc.

There are two primary barriers we must overcome: Capital intensive requirements, and CAA / other regulators compliance / restrictions especially around launch.

We will overcome the first issue through a considered commercial strategy. The standard sector approach of sequential grant and funding approach is tried and tested. Typically, piecemeal grant funding and investments that are limited in scale come in one step or project at a time. This is a fundamentally risky approach as these capital inflows are small, incredibly time consuming to apply for, with very low success rates. Launcher system development comprises many elements. Running these projects serially is time consuming and inefficient. Parallelisation of projects is the obvious solution but requires a different financial approach.

Full funding, or stage funding is sought, to complete the entire R&D phase, product realisation phase, and complete service development, as well as all go-to-market activities. This approach will allow Hybrock to run projects concurrently, reduce development risk, and ensure we not only catch up, but hit the market faster than our competitors. Hybrock's funding strategy, our next generation rocket technology, and our complete service offering will ensure that we remain competitively advantaged as the market matures. By pivoting our funding strategy away from the grant landscape and specific batch investment, we are significantly de-risking the long term security for our

Buckinghamshire LOCAL ENTERPRISE PARTNERSHIP THE ENTRIPIENEURIAL HEART OF BATTAIN









investment partners. We have a team of investment brokers seeking raises from High Net Worth Individuals and Private Multi Family Offices, as well as interested Venture Capital funds and other Angel Investors.

On the regulatory side of things, we are actively in conversation and working with the CAA and other relevant bodies, including the spaceports (e.g. SaxaVord) to ensure as flexible and unrestrained regulatory landscape as possible.

Briefly describe your competitor landscape and the differentiating factor of your business/ idea - In your answer, consider your local and international competitors, market trends, and other factors that influences your market.

The current trend for cube and small satellite payloads to overcome 'out of position delivery' is the reliance on in-orbit manoeuvring. Newer techniques and technologies, such as Electric Propulsion, provide a repositioning capability, but at a cost in terms of additional hardware adding mass and complexity. A manoeuvering capability will always be needed, for precise positioning and orientation, as well as debris avoidance. However, placing the payload closer to a desired position will negate the need to carry and burn fuel, potentially reducing the size of the positioning system and prolonging the payload's useful life.

Space X are market leaders for satellite launch and deployment, however the service provided to smaller payloads could be considered sub-optimal, as orbital positioning and launch window are driven by the requirements of the primary payload and not the secondary rideshare payloads. SpaceX typically mitigate these limitations and draw in customers by quoting a discounted launch cost per kilogram. It is our understanding that small satellite developers and operators see past the false economy of a low cost per kg, realising that the not so optional extras mount up and optimal orbital position is paramount.

There are many potential competitors, who are currently focused on testing or development phases of engine or launch vehicle, and are yet to develop a clear service offering. The leaders, who could reach the market before Hybrock, such as Hylmpulse, Orbex, Skyrora and Rocket Factory Augsburg, each have a chosen fuel approach, from LOX/Paraffin, LOX/BioLPG, HTP/Kerosene to LOX/RP-1 respectively, and each approach has its inherent advantages and disadvantages. Hybrock have defined their fuel approach to be minimum risk, complexity and environmental impact, whilst cognisant that no combustion process can be considered truly green, we will endeavour to take a greener approach through the entire lifecycle, encompassing all procurement, manufacturing, deployment and recovery.

# What impact do you expect your business to have over the next 5 years? – Growth, investments, sustainability, technology development, etc.

The next five years will see Hybrock grow from the current team of five to 50+ permanent staff, assuming Hybrock attracts the planned level of investment. This personnel expansion enables delivery on our key technology development milestones and creation of our end to end service offering. By 2028/29 Hybrock will have completed test flights on our orbital engines and be close to offering initial payload space for our orbital delivery system.









#### 8. Team

List your team members and briefly describe their experience and capabilities.

Thomas Ollier, CEO, BEng(Hons), MBA - Following reading Aerospace Engineering, Thomas served as a British Army Officer, before taking his operational and leadership skills into the management consulting sphere. He has significant in-industry experience in manufacturing, and as a strategic transformation advisor for PwC and Mace, specialising in aviation, aerospace and defence across both public and private sectors. Thomas leads Hybrock and drives the company's overall business development and direction.

Dr [CONFIDENTIAL], CTO (Propulsion), MEng, PhD - [CONFIDENTIAL] is an expert in hybrid propulsion technology having been awarded her PhD in this field by the University of Stuttgart. She holds the world altitude record for hybrid sounding rockets. Her experience is as a research engineer at the German Institute of Space Propulsion, and hybrid engine development lead at [CONFIDENTIAL]. [CONFIDENTIAL] is leading the engineering and intellectual property development of Hybrock's next-generation hybrid propulsion systems.

Dr [CONFIDENTIAL], CTO (Systems), MEng, PhD - After being awarded his PhD in hybrid rocket motor development and testing from the University of Padova, [CONFIDENTIAL] continued to modify this technology using hydrogen peroxide at the start-up T4i, before working at [CONFIDENTIAL] as lead motor testing and ground facilities engineer. His experience is centred around the practical implementation of hybrid motor technology into working systems. [CONFIDENTIAL] leads the engineering production and test activities at Hybrock.

Chris Watts, CTO (Integration), BSc, MSc - Chris has over 30 years' experience as an engineering design manager and integrator, combining Lean and Six-Sigma optimisation with scientific innovation and development, rooted in robust programme management and governance. He specialises in digital system modelling and simulation as well as applied robotics and machine learning. Chris leads Hybrock's technology functions and is responsible for the overall product roadmap.

Philip Bazlinton, COO, MEng - After gaining a degree in Mechanical Engineering from the University of Bath, Philip served as a British Army officer prior to developing a career as a technical planner, programme manager and business process specialist most recently in systems and product manufacturing within the oil and gas industry. He has a broad experience of operations and in-depth experience of planning and process management. Philip leads Hybrock's operations functions and is responsible for the overall service delivery roadmap.

#### Describe the skills and capability that your team has which will help you grow your business.

Hybrock is led by a team of experienced professionals with diverse backgrounds in aerospace engineering, hybrid propulsion and rocket motor development, program management, commercial business optimization, system modelling and simulation, and applied robotics and machine learning. Collectively, the team brings a wealth of experience and knowledge to drive the overall business development and direction of Hybrock.

Our skills and capabilities in sourcing and scaling the financial instruments required to realise our company's ambitions are a recognised area for development and as such we are turning to the











Satellite Applications Catapult and the services available in the Incubator programme for support in these fields.

Highlight (if any) skills that are missing from the team and briefly outline what the team is doing in order to solve this.

Hybrock's core team has diverse backgrounds and strong technical and managerial skills to drive the overall business development and direction of Hybrock. Being at the beginning of Phase 0 (Company Scale-up & Preliminary Development), Hybrock possesses the required skill set to start the fundamental development of our core technology. In order to move successfully to Phase 1 (Early TRL & IP Development), however, there is the need to increase the number of employees to address the lack of specific technical skills. Some examples are:

- CFRP (carbon fibre reinforced plastic) manufacturing
- Type V (linerless) composite high-pressure vessels
- Avionics and control systems
- Electric pumps
- Stage separation system

In the wider context, Hybrock will need to onboard skill sets and capability breadth and depth, not only in the technical domain, but also across all business functions, initially focusing upon areas such as human resources and finance and later including marketing, business development and manufacturing/production. It is Hybrock's intent to work with selected recruitment agencies familiar with each skill domain to attract and secure the best team for our expansion and ongoing success. Further, we will work closely with Further Education institutions as individuals graduate from their undergraduate, masters and doctoral programmes. We have already engaged with the University of Cambridge and are connected into the Space South Central universities network.

#### 9. Funding

*Please highlight the amount of funding received till date in the form of investments, grants, awards, business support and any other sources. For each funding stream mention the name awarding body.* 

#### None to date.

What impact did each funding stream have on your business?

N/A.

#### 10. Future Roadmap

*Where do you see your business in 5 years and 10 years' time? - Briefly describe your plans for growth, technology development, partnerships, investments and acquisitions, etc* 

Hybrock has a well-considered and structured 10-year plan, split across 5 phases (0-4). These phases are:









- Phase 0: Company Scale-up & Preliminary Development (start in 2023)
- Phase 1: Early TRL & IP Development (start in 2024)
- Phase 2: Large Engine Test & Launch (start in 2026)
- Phase 3: Full System Demonstration & Initial Commercial Mission Execution (start in 2028)
- Phase 4: Full Cadence Commercial Launch Provision (start in 2031)

We are currently at TRL3, approaching 4. We shall move through the TRLs over the first 5 years, reaching TRL9 in 2028. We have four major milestones (MS) over this development period:

- MS1: Digital Twin Validated (2025)
- MS2: First Sounding Rocket Launch (2027)
- MS3: First Commercial Orbital Launch (2029)
- MS4: Full Operational Capacity (2031)

It is at MS3 that we become revenue generating; the period prior will be R&D and service-offering development. Following our first commercial launch, we plan to develop the serial productisation of our rocket manufacturing, in order to meet the expected demands of the sector and hit our revenue goals, which are linked to the number of yearly launches. At the 10-year point, i.e. 2033, we shall have full production capability and be delivering 24 launches per year, generating revenues in that year of £185m. Throughout our journey, we shall be continually looking for partnership opportunities, particularly as we shall be striving to create a full strategically integrated supply chain, both horizontally and vertically. We have already identified organisations that are strong contenders for potential collaboration partnerships (in the areas of rocket first-stage guided recovery and thirdstage in-orbit precision-manoeuvring thrusters), along with commercial partnerships (e.g. AstroAgency for our strategic marketing activities). We shall also work closely, in the spirit of mutually-beneficial partnering, with all relevant government agencies (CAA, UKSA etc.) and leading government and nongovernment bodies (SAC, UKRI, STFC, National Space Partnership, UK Space etc.). We consider Hybrock to be an enduring business that shall grow as the sector grows. If there are opportunities along the way to bring key partners or other organisations into our fold, through acquisition or other means, these shall be considered as and when they present.

# 11. Westcott Incubator and Accelerator Programme specific questions

#### 11.1 Incubator programme

Briefly describe why you chose the WIA programme as a support service.

The WIA programme specifically offers areas of support that other programmes do not, most notably:

- Market exploration and prioritisation
- Competition analysis and route to market strategies

Buckinghamshire LOCAL ENTERPRISE PARTNERSHIP THE ENTERPRESEVAN. HEART OF BATTAIN









- Business modelling and commercialisation support
- Communication support for partnership building or investor readiness
- Access to mentors, industry, academic and financial networks

Our primary focus is investor readiness. We need specialist business case production support, including qualified verification, independent financial due diligence, independent market opportunity validation, full-spectrum supply chain mapping, investor material preparation and direct access to meaningful non-public/published datasets. We need support in articulating and communicating our investment proposition effectively with PEs/VCs, High-Net-Worth Individuals and Private Multi-Family Offices. This includes advice and support in the preparation of all investor collateral and guidance in answering the types of questions put forward by potential investors. These areas would support Hybrock in accelerating product and service development, optimising its business operations, and maximising its growth potential. The WIA programme, through the service offerings advertised, would directly align with our needs at this point in time.

In what specific area(s) would business support be of most value to you? – Consider points such as business strategy, market exploration, design thinking, etc.

Business support would be of most value in areas such as investor preparation, business case development, financial verification, market validation and prioritisation, competition analysis, and route-to-market strategies. We would also benefit from tailored business, design, and technical support, business evolution sprints, business modelling and commercialization support, design thinking approaches for service development, satellite technology incorporation considerations, and communication support for partnership building or investor readiness. These support offerings would help us obtain the necessary funding to accelerate product and service development and effectively bring our products and services to market.

*Describe the areas where specialist business support would be of benefit – Consider points such as technical expertise, international expansion, getting investment ready.* 

Hybrock would benefit from support in several areas, including:

- Market exploration and prioritisation
- Understanding market trends, competition analysis and developing route to market strategies.
- Competition analysis and route to market strategies
- To fine-tune our key differentiators and make us as attractive to the market as possible -Business modelling and commercialization
- Determining viable business models and strategies for commercialization of our products and services.
- Communication support for partnership building or investor readiness
- Providing support for communication and building partnerships, as well as preparation for attracting investors.
- Access to mentors, industry, academic and financial networks
- Bringing on board potential advisors and collaborators, to help credentialise ourselves in front of investors. To gain invitations to speak/pitch to investors and help in leveraging other financial instruments.









In summary, support in market research and analysis, business strategy development, technology incorporation and communication, and service design would be of great value to us.

State the amount of funding required for the incubator programme.

Based on the post-diagnostic support agenda £20,000 of funding is required.

#### 12. Impact

*Please describe the anticipated impact on your business from participating in the Incubator or Accelerator Programme – Consider impact on business growth, technology, economy, sustainability, job creation, attracting investments, etc.* 

The incubator scheme will be invaluable in helping us develop the business case, investor material, raise capital and subsequently establish a successful business with a nucleus in the Westcott area.

The programme will help to fill the gaps in knowledge, skills, and experience that we currently have as a team. This will help us develop a robust business model and competitive product that aligns with market needs. The market exploration and prioritisation support offered by the programme will increase our chances of commercial success. Furthermore, access to non-public data will provide valuable insights for our market strategies and investor readiness preparation.

What we plan to achieve is of significant scale. The incubator will facilitate the formation of valuable partnerships with potential partners, both locally and beyond, that will bring mutual benefits to the collaboration.

In summary, participating in the Incubator Programme will provide us with a unique opportunity to develop and grow our business, and we expect it to have a significant impact on our commercial potential and long-term success. Overall, the incubator scheme will help us bring our vision to life.

How would you propose to measure the impact of the programme on your business and over what timeframe? Please list at least three metrics.

To measure the impact of the programme on our business, we propose to use the following metrics:

- 1. Investment raising: A key metric would be the securing of funding that would have stemmed from the support given to produce the necessary investor collateral.
- 2. Technical Progress: This could include metrics such as completion of key development milestones, number of prototypes developed, and performance tests conducted.
- 3. Partnership Building: This could include metrics such as number of partnerships established, new collaborations formed, and deals signed.
- 4. Market Understanding: This could include metrics such as increased market knowledge and insights, improved market validation and targeting, and increased customer engagement and feedback.
- 5. Complete Product Development: We will track the progress of product development and measure it against our planned timeline. This will give us a clear understanding of how the









support from the Incubator Programme has helped accelerate our development and bring our product to market faster.

We anticipate that the impact of the programme will become clear over two main periods that follow each other. The first would be in the initial few months where we would hope to raise capital. Once up and running, the key developmental aspects supported by the programme would become clear over the subsequent 12-24 months.

*If access to the Incubator or Accelerator Programme was not available, what impact would this have on your business?* 

If access to the Incubator Programme was not available, it would likely have a significant impact on our business. Without the specialised business, design, and technical support provided by the programme, it would be more challenging for us to accelerate the development of our innovations and bring our product or service to market. Furthermore, without the tailored package of support, we would likely have to rely on alternative means to explore the market, prioritise competition analysis, and develop strategies for commercialization, which could result in delays or reduced effectiveness in these areas.

What do you see the impact and commercial potential of your product/service being over the next 5 years?

Over the next 5 years, we aim to develop a viable route to access space and help establish the UK small-sat launch industry. This will involve designing and testing hybrid rocket motors, developing technology such as high-fidelity digital twins to enhance the development process, and exploring potential future logistic solutions for satellite operators. This will position us as a key player in the industry and set the stage for future commercial growth.

#### 13. Location

Do you currently operate in Westcott Venture Park or within Buckinghamshire?

#### Outside of Buckinghamshire

*Please describe how your participation in the Programme will support the growth of the Westcott Space Cluster and the wider Buckinghamshire economy.* 

Hybrock are intent on finding a test and development hub where initial smaller engine tests can be carried out with ease. Given Westcott's history, recent and current tenant companies, we believe the Venture Park to be one of the few venues in the UK equipped, both in facilities and mindset, to support our aims and aspirations.

By participating in the Incubator Programme at Westcott, we would aim to contribute to the growth of the Westcott Space Cluster and the wider Buckinghamshire economy by leveraging its expertise









and capabilities in the field of hybrid rocket propulsion. Our goal is to advance the development of this technology and bring new innovations to market that will drive growth and create high-skilled jobs in the region. Additionally, we would intend to engage with local suppliers, service providers, and academic institutions, thereby supporting the growth of the wider local ecosystem. Through the exchange of knowledge and expertise, Hybrock and the Westcott Space Cluster can work together to push the boundaries of space technology and support the growth of the space industry in Buckinghamshire.

## 14. Terms & Conditions

Constraints: are there any legal, regulatory, or technical barriers for the project? If so, please detail.

At this time, we are not aware of any legal, regulatory, or technical barriers that would prevent our project from being executed. However, as regulations and technology can change, we will continue to monitor and assess potential barriers to ensure the successful completion of our project.

*Please confirm that you agree to be bound by the Satellite Applications Catapult Terms and Conditions.* 

I Agree

*Please confirm that you agree to your data and application being shared with our partners for this programme - Buckinghamshire Local Enterprise, Buckinghamshire Business First and Buckinghamshire Enterprise Zone* 

I Agree

## 15. Financial Checks Summary







#### Catapult Open



credit <b>safe</b> "		Company: Printed By: Printed On: Text Reference:	HYBROCK LTD (UK19644664) Karena Richens (101513166) 11:36 Wednesday 10th May 2023				
(GB) HYBROCK LTD Risk Score Ir 49	Score C	Credit Limit £500	Contrac	t Limit	Status Active	DBT -	UK19644664 Industry DBT -
Summary Company Informa	ition						
Key Information Company Number Company Name Company Status Incorporation Date Company Type VAT Number SIC07 Code SIC07 Code SIC07 Description Additional Informat FTSE Index Share Capital Currency Principal Activity Accounts Due Date Trade Debtors	13812424 HYBROCK LTD Active - Newly 21/12/2021 Private limited - 51220 Space transpo - 51220 GBP - 21/09/2023 No	) / Incorporated d with Share Capital art		Conta Address Website Telepho Trading Filing Dat Charity N Safe Num Accounta Charges Land Reg	ct Informati s: e: ane Number: a Address: a Address: a Of Accounts umber aber at stry	ON GREENFIELDS COLLEGG HAYWARDS HEATH, RH view on map · · · · · · · · · · · · · · · · · · ·	E ROAD, ARDINGLY, 17 65A 5 N ad, Ardingly, HAYWARDS
CCJ Summary No CCJ information to displu Ultimate Holding Co There is no Ultimate Holdin	ay ompany g Company inform	ation to display					
Key Financials No Key Financials Information	on To Display						







