# NewSpace Center, LLC

# Executive Summary

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# **EXECUTIVE SUMMARY**

NewSpace Center, LLC will become the leader in real-space themed, immersive entertainment through creation of a unique space destination, INTERSPACE. It will serve a quantified market of over 100 million interested US adults of which over 27 million would intend to visit as one-day guests and over 26 million would intend to visit as multi-day guests.

INTERSPACE, a 70,000 square foot destination on Florida's Space Coast, will serve 250,000 guests per year. The attraction will immerse its guests in a dynamic, visceral, hands-on adventure, unlike any other place on Earth. Guests themselves will become space *EXPLORERS* and *SETTLERS*, interacting with NewSpace companies and technologies, training with high-tech tools needed in the space frontier, and glimpsing into the future by visiting the largest indoor Mars simulation in the world. INTERSPACE will blur the line between visions of our future in space, and tangible reality.

# A New Barnstorming Era

A new space race is upon us! Private companies and individuals are breaking down the bonds of Earth. In a modern gold rush, these daring barnstormers are seeking their fortunes on the high frontier and providing the opportunity to experience space first hand. These entrepreneurial "NewSpace" firms are pursing space tourism, commerce, and ultimately settlement in a departure from past government centric programs.

The movers and shakers in this new era include spaceflight training providers (Space Adventures, NASTAR Center, XCOR Space Expeditions, Incredible Adventures, Waypoint2Space, Black Sky Training, and Starfighters Aerospace), micro-gravity experience providers flying parabolic aircraft (airZeroG, and ZeroG Corporation), sub-orbital tourism providers (Virgin Galactic, XCOR Aerospace, and Worldview Enterprises), orbital spaceflight and cargo delivery providers (SpaceX, Boeing, Orbital Sciences, Blue Origin, and Space Adventures), earth-orbiting hotel providers (Bigelow Aerospace), asteroid mining companies (Planetary Resources and Deep Space Industries), and lunar payload delivery companies (Moon Express, Astrobotic, and SpaceIL). Additionally, a variety of smaller firms and organizations have emerged to support the new industry. All of these firms share a common long-term vision for space which includes private exploration, development, and settlement.

# The Opportunity

The public is excited by the innovation and great daring of these new barnstormers, and many want to take part in this real adventure. Yet NewSpace is largely inaccessible. Many members of the public cannot afford ~\$35+ million (orbital) or \$100k-\$200k (suborbital) for an actual space experience. NewSpace testing & development is taking place at spaceports far from population centers & tourist sites. Finally, those venues that are accessible (existing air & space venues), focus on the past and not on leading edge technology or our real future. This context serves as an ideal environment for INTERSPACE.

# **Our Solution**

INTERSPACE will be an immersive, hands-on, real-space destination, the first to capture the energy and spirit of the new barnstorming era. It will consist of three core areas:

- **Contact Terminal** Guests will access the latest advancements and breakthroughs from the NewSpace industry via coverage of breaking events, appearances by NewSpace leaders, and live demonstrations. They can even purchase tickets for real spaceflight and space training experiences.
- **NewSpace Training Center** A dynamic and high energy interactive proving ground featuring commercial space ventures, settlement technologies and our guests! As a space **EXPLORER**, guests will experience centrifuge training, operate aerial & ground robots, test out the latest spacesuit technology, fire a real rocket, and much more.
- **Expo Mars** A compelling ride-show will transport our guests to Mars, where they land at the first settlement. **EXPLORERS** (day guests) see the Martian surface and peek into the settlement as **SETTLERS** (multi-day guests) role play as real Mars settlers. Fully immersed in the <u>largest indoor simulated Mars environment in the world</u>, guests will test their skills as they overcome exciting challenges.

#### **Ideal Location**

INTERSPACE will be located on the company's currently leased 75 acre Titusville-Cocoa Airport site in Titusville, FL – Brevard County. The site is in close proximity to an I-95 interchange, features 1,800 feet of frontage along the major corridor (Route 407) between Orlando and Kennedy Space Center (KSC), and is 10 miles closer to Orlando tourists than KSC. INTERSPACE will benefit from proximity to an established spaceport, a strong technical workforce, and from the Space Coast brand.

The 75 acre NewSpace Center, LLC mixed use site includes expansion space that allows footprint growth of up to three times the initial size for future partner operations as well future INTERSPACE expansions. An additional several hundred acres of airport land are available for expansion beyond the currently leased site.

# **Building a Premiere Space Destination**

The INTERSPACE attraction is the core element of what will become a dynamic, space-oriented site featuring a space-themed hotel, space-themed restaurant, retail space, a specialty theater, commercial / light industrial space, an education institution and a conference center / hotel. These unique business opportunities will benefit from the captured "space curious" market and drive increased INTERSPACE attendance.

#### **Revenue Model**

INTERSPACE will serve  $\sim$ 240,000 *EXPLORERS* per year and  $\sim$ 7,500 *SETTLERS* per year, generating  $\sim$ \$59.6 million in annual revenue derived from direct sales. The revenue model is conservative because it does not include income from other potential sources including product placement, advertising, education programs, subleases & other contracts. Net yearly income is  $\sim$ \$26 million on a cash basis.

The price for the *EXPLORER* experience is an average of \$90 / person, which is comparable to, or below, Disney, Universal, and SeaWorld. The price for the more exclusive multi-day *SETTLER* experience is an average of \$750/day. (See validation below).

# **Target Markets & Validation**

The INTERSPACE market can be described as the "Space Curious," those interested in space exploration, science & technology, new exciting challenges, science fiction (television, movies, books, and magazines), adventure tourism, NASA programs, and in the commercial space industry.

The INTERSPACE concept, revenue model, price points, guest throughput and target markets have been validated through a statistically relevant market demand analysis conducted by the Dick Pope Sr. Institute for Tourism Studies at the UCF Rosen College of Hospitality Management. The analysis was based on an April 2010 Travelhorizons™ survey of 2,200 U.S. adults that included INTERSPACE specific questions. This survey is a well understood and vetted industry benchmark that themed entertainment leaders including The Walt Disney Company and Universal Parks and Resorts have used to justify new attractions. Also, four focus group studies have been conducted by the Rosen College with diverse sets of central Florida tourists, to guide concept development. INTERSPACE market demand, as indicated by these studies, is conservative in that only domestic demand was considered.

## **Competition & Demand Drivers**

The INTERSPACE concept and approach are unique, however competitors do offer products and services with some similarities, though different fundamental focus.

Kennedy Space Center is the nearest perceived competitor with  $\sim 1.5$  million visitors per year (2009 - 2013 data), although their focus is on past NASA accomplishments, current government programs and there are no meaningful Mars or NewSpace elements. KSC serves as an existing demand driver, bringing space curious customers into the county. Also nearby in central Florida is the Mission Space attraction at Disney's EPCOT Center. It features a realistic g-force launch simulation but its Mars surface story is inaccessible and unrealistic.

Various NASA visitor centers throughout the country (including Houston, TX and Huntsville, AL) also focus on space-program history and have few if any Mars elements, and no NewSpace elements. These attractions are exhibit based and not generally interactive. Other aerospace and science venues across the country present historical exhibits and some Mars elements.

# **Design and Management Teams**

NewSpace Center, LLC has assembled a highly experienced themed entertainment, program management, and technical team to create, produce, and build INTERSPACE. Ron Logan, former Vice President and Executive Producer for Walt Disney Entertainment Worldwide, and Abraham Pizam, Ph.D., dean of the Rosen College of Hospitality Management, have been primary advisors. The executive producer is a combined Idea, Inc. and MY Design team that includes Hugh Darley (prior Disney Imagineer and Paramount executive), Michael Yager (prior Disney Imagineer and Senior show designer for ITEC productions), and Mark Mazzanti (former technical director for MTV and the Nickelodeon elements of Paramount Parks).

Program management and technical support are provided by partner 4Frontiers Corporation including founder Mark Homnick, CEO (former Intel Program Manager for over \$1 billion in commercial capital projects), founder Joseph Palaia (MS MIT and recipient of multiple international space entrepreneurial awards), and advisors including Buzz Aldrin, Ph.D. (astronaut), and Chris McKay, Ph.D. (astrobiologist and NASA Mars expert). The INTERSPACE experience is based on real technology generated by 4Frontiers from two Mars settlement studies that included more than 70 scientists and engineers.

Architecture and engineering is by HHCP, an experienced themed entertainment design firm and winner of multiple international design awards including The Palm (Dubai) and SeaWorld Orlando. The construction manager and general contractor is currently being selected, and will be experienced with themed entertainment construction.

# **Founders Motivation**

For the founders, INTERSPACE is not just a themed attraction, but an actual proving ground and development center leading us to a future on Mars. As such, INTERSPACE incorporates the actual Mars settlement designs and knowledge from 4Frontiers Corporation, to arrive at a compelling and technically accurate experience. The founders intend to reinvest a significant portion of their share of the profits from the venture into the development and testing of real Mars settlement hardware, and into other profitable space-related enterprises. This will greatly advance the state of the art in Mars exploration and settlement technology while simultaneously enriching and enhancing the INTERSPACE guest experience. Members of the public and like-minded companies will be attracted by this resolve.

INTERSPACE will attract and seed multiple NewSpace partners, companies and ventures. As the space frontier grows, INTERSPACE will grow with it. The founders, through their direct involvement, will strive to continually refresh and expand the INTERSPACE experience with the latest advances from 4Frontiers and other NewSpace partner development programs.

## **Schedule**

NewSpace Center, LLC intends to begin detailed design of the guest experience, site and facility in the 3rd quarter of 2017. Groundbreaking would be in the first quarter of 2018. INTERSPACE grand opening would occur in the summer of 2019.

# **Accomplishments**

The company is actively developing INTERSPACE and accomplishments to date include:

- 75 acre site under signed (50 year) lease contract with the Titusville-Cocoa Airport
- Titusville & Brevard County Tax Abatements in place (7 years, ~\$200k per year)
- Space Coast Office of Tourism has committed to make INTERSPACE the centerpiece of a \$4M promotional campaign.
- Titusville Mayor & City Manager have provided letters of support.
- ~\$1M Seed funding obtained which covered Master Planning, Programming / Pre-Design & Initial Business Development
- Concept development including site layout, visitor experience, and building architecture complete
- Site master planning, CPA (Comprehensive Plan Amendment) and rezoning complete
- Show, design and construction estimates validated through expert third parties
- 25 Letters and Statements of Support from leading scientists, politicians and opinion leaders
- 18 MOUs signed with potential partner companies and organizations, including Aurora Aerospace, ILC Dover, Kuka Robotics, Orbital Outfitters, SpaceWorks Commercial, Stellarwind Bio Energy, and XCOR Aerospace
- Executive Producer & Experience Design Team selected (Idea, Inc & MY Design, Inc.)
- OmniBus marketing study complete validated, statistically relevant demand & revenue assessment

# **Financials & Funding**

NewSpace Center, LLC is structured as a high-return passive income generator. Total financing of \$80 million will bring the company to commercial readiness and profitability in 2019 by funding INTERSPACE detailed design, sitework, construction, and initial operations. This initial phase will develop  $\sim\!26$  acres out of the currently leased 75 acre site, leaving substantial space for future expansions and additional partner operations.

NewSpace Center, LLC financial projections for the initial phase, including capitals costs and operating expenses, are based on statistically relevant direct market data, expert third party analysis, and quotes from key equipment and service providers. INTERSPACE can cover all operational costs (i.e. breakeven) at approximately half of the planned visitor count, and current validation data conservatively neglects non-domestic demand. A comprehensive assessment of risks and risk management is included in the business plan.

The company intends to obtain approximately \$30 million in equity investment from one or more private investors through a private placement funding process. The average annual simple return for investor equity participation is at least 30%, with distributions starting in 2020 after the INTERSPACE grand opening. The balance of the required \$80 million initial phase financing will be obtained through an approximately equal combination of public bonds and commercial debt. The 75 acre site qualifies under the USDA Business & Industry Loan Guarantee Program, providing an additional option for the commercial debt financing.