

GRAVITY PULSE: ZGAC Parabolic Flight for Artists and DataFlux: Proposed Live Interactive Webcast

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INTRODUCTION

As Co-Founder and Project Director of the Zero Gravity Arts Consortium I am responsible for creating, managing and producing the Zero Gravity Arts Consortium Parabolic Flights for Artists in partnership with a team of international space artists, affiliate institutions and collaborators. I have been instrumental in directing and helping conceive these flight projects that include:

SkyStudio, a parabolic research flight for artists, flown as a part of the Space Art Track of the 25th International Space Development Conference on May 4, 2006, by Zero Gravity Corporation from Burbank airport,

GravityPulse, a parabolic flight for artists planned to be flown from Kennedy Space Center in the Summer of 2006 with the associated project

DataFlux, a live interactive webcast from ZGAC's Parabolic Flight for Artists, as described below.

When I flew on NASA's KC135 in 1998, the concept for creating a live interactive webcast during parabolic flight, was considered for implementation; however, I was not able to implement the webcast at that time because of logistical constraints despite trying to do so.

Since that time the live interactive webcast concept has evolved as a result of many conversations with members of the flight team including Lowry Burgess, David King, Celestine Star and the Golden Star Media Crew, Gavin Starks and many others. Our flight team now plans that DataFlux be actualized during GRAVITY PULSE: Zero Gravity Arts Consortium Parabolic Flight for Artists proposed for flight in the summer of 2006.

SKY STUDIO: ZGAC Parabolic Research Flight For Artists
May 4, 2006, Los Angeles, Burbank Airport

GRAVITY PULSE: ZGAC Parabolic Flight For Artists
Summer of 2006, NASA Kennedy Space Center

DATAFLUX: LIVE INTERACTIVE PARABOLIC FLIGHT WEBCAST

ZGVC ZERO GRAVITY ARTS CONSORTIUM
PARABOLIC FLIGHT FOR ARTIST
FLOWN BY ZERO GRAVITY CORPORATION

IN COLLABORATION WITH
STUDIO
FOR CREATIVE INQUIRY

7 ONBOARD ARTISTS' STAGING AREAS
RUNNING DOWN THE LENGTH OF JET
9' long x 10' wide x 62" high

DVCameras Documenting in each Staging Area
Proposed Blue Screen
AVProjector in some areas
Camera Mounts

FLIGHT WEBCAST
A post-flight webcast will be produced in collaboration with Exequo, the Open Broadcast Network, General Orbital Corporation and Philco

THE PLANETARY SOCIETY
National Space Society
international space development conference

Flight Team Artist: Kristen Burgess Agee, Lowry Burgess, Tania Fraga, Lorelei Lisowsky, Otto Piene, Frank Pietronigro, Brad Pitts, Gavin Starks, Chris Robinson, Ricky Seabra, plus proposed team of students from the College of Fine Arts at Carnegie Mellon University and the San Francisco Art Institute.

Digital Simulation of DataFlux Concept by Frank Pietronigro, 2006

SKY STUDIO: ZGAC Parabolic Research Flight For Artists

Program highlights of the Space Art Track include a series of two flights, **SKY STUDIO**, a space art research flight scheduled to take place in Los Angeles on May 4, 2006 as a part of the Space Art Track of the 25th International Space Development Conference. To support **SKY STUDIO**, Zero Gravity Corporation will ferry a Boeing 727 jet from their home base in Ft. Lauderdale to Los Angeles and will fly **SKY STUDIO** from Burbank Airport.

GRAVITY PULSE: ZGAC Parabolic Flight for Artists, is the second flight planned by ZGAC that will fly from the Kennedy Space Center sometime during the summer of 2006. This interdisciplinary collaborative project will feature twelve teams of internationally acclaimed artists flying a variety of unique Space Art projects, while providing people worldwide with a glimpse into this fascinating genre via the internet as a part of a third project called **DATAFLUX**, planned for webcasting live from the jet. Gravity Pulse, which is the first flight of its kind to be flown in the United States, will showcase cutting-edge interdisciplinary, multicultural Space Art projects created by artists whose provocative new works are defining and expanding the scope of this fascinating genre.

To fortify the connection between Gravity Pulse flight, taking place later in the summer of 2006 and the Space Art Track, most of the artists flying projects during Gravity Pulse will publish and present papers about their work during the Space Art Track of the 25th International Space Development Conference 2006. Art projects proposed for flight will be discussed during presentations as a way of informing and inspiring conference attendees to the conceptual relationship between the parabolic flight, the Space Art Track and new visions for cultural activities in space. Multiple projects that directly respond to the unique conditions of microgravity will be flown including projects created by teams of experts in the fine arts, webcasting, engineering, space sciences, psychology, history and cultural theory. Some of the artists, representing various cultures from around the world, will create new art that reflects their cultural experience in microgravity reinforcing opportunities for international projects and audiences.

It is proposed that via DataFlux audiences worldwide will experience the artists and their work during an interactive webcast that will be presented direct from Gravity Pulse flight that will be flown from the NASA Kennedy Space Center in the summer of 2006.

The Sky Studio research flight will be flown from Los Angeles International Airport on May 4, 2006, as a way for the artists to engage in flight research that will be discussed and refined during the Space Art Track. The SKY STUDIO flight will be enjoyed during a Space Art Screening at the ISDC conference hotel following the flight on May 5, 2006.

PARABOLIC FLIGHT THEATRE

To help foster greater access to space, these two flights will showcase a 'Zero Gravity Theatre' where audience members will experience the artists and their microgravity art processes first hand, while floating in weightlessness, as a unique theatre experience. Multiple seats on the flight be reserved for a theater audience as a way of fortifying the relationship between audience and artists. A 'Theatre Ticket' will be sold for each audience seat as one way of generating revenue for the project. Marketing the flight in such a way may prove to facilitate unforeseen benefits for sponsors and affiliate institutions as well as set the stage for microgravity and space tourists' theatres of the future.

SPACE ART HISTORY

To expand upon the historical precedents of traditional space art forms such as: painting, drawing and illustration, a new breed of Space Artists has arrived on the scene, some of whom combine artistic methodologies with the technologies utilized by space science and the space explorer, while in partnership with scientists their collaborative teams are expanding the cultural utilization of space exploration in ways that will fascinate a new generation of space explorers to dream and become inspired with the possibilities of their future lives in space.

GRAVITY PULSE: SPACE ARTIST FLIGHT TEAMS AND PROJECTS include:

Lowry Burgess and Kristen Burgess Agee

Moments in the Infinite Absolute
United States

Tania Fraga, Frank Pietronigro and Gavin Starks

Gravity Fluxions: Pulsations
Brazil, United States and United Kingdom

Japanese Artist

Project Title: TBD
Country: Japan

Lorelei Lisowsky and Lowena Hearn

SkyLife Colony (Evolution Colony Testbed) by Bright Capsule
United Kingdom

Bradley Pitts

Singular Oscillations
United States

Chris Robinson

Observing
United States

Ricky Seabra

Isadora orb, The Final Metaphor and the 'Skipping Halls' in Lunar Gravity
The Netherlands

STUDIO For Creative Inquiry Artists Team

Project Titles: TBD
Team Members: TBD
United States

Martha Blassnigg and Michael Punt

Project Titles: Beyond the Ubiquitous Spectrum
United Kingdom

DATA FLUX: LIVE INTERACTIVE WEBCAST

A further level of concept development for Zero Gravity Arts Consortium (ZGAC) Parabolic Flight for Artist: Gravity Pulse is a interdisciplinary new media project called DataFlux – The Third Space a collaboration of artists and engineers who will facilitate a live interactive webcast from inside a jet flying roller-coaster parabolas between 24,000 and 34,000 feet over the Pacific Ocean. Flying from Ft. Lauderdale, Florida sometime in the summer of 2006, DataFlux will offer multiple interdisciplinary multicultural space art projects that will serve as the subject matter for interactive webcasts, video documentaries and other publishing projects

The goal of this webcast is to enrich an international audience's understanding of the sensations artists feel during parabolic flights, and to educate larger audiences to the diversity of space art projects and plans for the cultural utilization of space. This dynamic interdisciplinary live interactive webcast with music, audio and biometric data feeds will extend this unique space artists 'theatre' to international audiences who will experience the flight virtually through a the live interactive webcast.

David King, of General Orbital Corporation, and Gavin Starks, the Founder and Director of Exequo Ltd, an open, non-profit, collaborative Internet broadcasting network working with community collectives and artists, will support the production of the webcast. Gavin Starks is Founder and CEO of Tornado Productions Ltd. a company that is involved in every aspect of creating and running one of the largest webcasting companies in Europe. He is founding member and now Chairman of the IWA-Europe, a consortium encouraging all forms of broadcasting on the Internet.

ZGAC also proposes to work in partnership with scientists, engineers, psychologists, programmers and other technicians at Carnegie Mellon University and other educational institutions to develop new technical systems that combine robotics and multimedia to create future ground-to-zero gravity-to-internet interactive connections so that a webcast audience can interact with the space artists and impact the art being created, in real time, on this parabolic flight.

As a part of the Gravity Pulse flight, affiliate institutions from around the globe will be invited to host live interactive webcasts from their various institutions.

Coined by Lowry Burgess, the jet itself will serve as a unique 'sensing sculpture' capturing fascinating video, audio as well as monitor various biological functions, including their cerebral activity of the artists, while they create in microgravity. This data produced by artists onboard the flight will be made available to Affiliate/Collaborating Institutions who, in turn, will use that information as the basis to produce new artistic responses, reflecting that data, as multiple live interactive webcasts originating from their institutions. Sponsors are encouraged to join us in this production.

The collaborations supporting these ZGAC Parabolic Flights for Artists will serve as a conceptual model to study similar new media Space Art projects that would propose, in the future, to use the International Space Station as a similar 'sensing sculpture'.

DataFlux – The Third Space

Jet To Ground - From Sky To Earth

DataFlux is the structuring of extraordinary potential to map multiple parallel data flows by scanning the human body from the outside and inside as it fluxes upon the parabolic waves from 1G to 0G to 1G to 2Gs to 1/6thG and so on, repeating again and again, within the envelope of the jet.

DataFlux is the imaging of the 'data-halo' that surrounds the jet and the artists creating during flight. Flows of data, from these onboard DATA CREATORS are transmitted by sensing technologies mapping the activities of sight, sound, touch, thermal, movement, taste, smell, as well as reactions of the heart, brain, and general biometrics. All in a continuous DataFlux that has important correspondences, a fugue or multi-voice score will be co-created fostering many interacting data voices that can be simultaneously displayed, digitally modified then presented and further studied. Raw data will be archived in a database and will be further developed as extended art forms by affiliate institutions and data-imaging artists not only during the flight, but also as live interactive webcast or used for scientific research and art making at a later date. The ZGAC Parabolic Flight for Artists: Gravity Pulse develops the holistic opportunity to creatively image these simultaneous data flows by new kinds of artists during live

interactive webcasts originating from affiliate institutions.

Within Zero Gravity Corporation's Boeing 727 aircraft, the DataFlux project builds and structures an externally sensing architecture both physical and electronic as if the normal sensorial were turned inside out forming a sensing cylinder around the gravitationally activated human core pulsing upon and within the parabolic gravity waves. The human being in multiple states of gravity is the object of the sensing, being sensed from both inside and out. DataFlux is the technological sensing architecture that surrounds the Gravity Pulse flight. This DataFlux is both processed on board by DATA CREATORS and on the ground by DATA USERS via a DATA SERVER.

Within the parallel ground station space (laboratory/exhibition) the multiple data flows are reformed as image, sound and movement, light and pulse -- a living envelope around the participants that places their sensorial systems within the living real-time Data Flux being experienced by the parabolic flight team. Within this DataFlux synaesthetic envelope the participant will tele-replicate the Gravity-Pulse experience to webcast audiences via live interactive webcasts emanating from their respective institutions. Beyond this tele-direct experience of microgravity space, the DataFlux databank, containing raw data gathered during the flight, will be used for further research in science and art while providing new imaging experiences to webcast audiences who experience DataFlux during live interactive and post production DVD projects. All content of the databank will serve as the basis for new artistic projects.

THE THIRD SPACE IN THE AIR - ON THE GROUND - VIRTUAL

DATA CREATORS - DATA SERVERS - DATA USERS

DATA CREATORS

The Zero Gravity Arts Consortium Parabolic Flight In-Flight Artistic Teams will support the project as DATA CREATORS while Golden Star Productions provides all video documentation of the process, mixing the data into a video, audio uplink to a satellite in support of DataFlux webcast. DATA CREATION will be facilitated in collaboration with Lowry Burgess, Frank Pietronigro, Celestine Star, Gavin Starks, David King, and others TBD.

DATA SERVERS

Webcast service providers (Exequo, the Open Broadcast Network, London, United Kingdom) will serve raw data from the jet to the DATA USERS

DATA USERS

will include individual artists, scientists and multiple international institutions

collaborating with the Zero Parabolic Flight for Artists: Gravity Pulse through the execution of personal work conceived, developed and presented from their various individual and organizational websites, offering the live and Interactive portion of webcasts produced by various DATA USERS. 3D modeling, video, text based, audio, gaming and other new media projects are encouraged and welcomed. Websites created by all DATA USERS will be posted on each website, in addition to the ZGAC website, the STUDIO, National Space Society, the Planetary Society and/or the ISDC websites.

DATA USER INSTITUTIONS

A variety of international affiliate and collaborating institutions may access the data on the servers in order to create new projects based on the data created by DATA CREATORS.