



Flying Past Expectations **Oakland Aviation Museum**

Amelia Exhibit: Presentation Book
Prepared by Studio 187, 06.04.15

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Flying Past Expectations

Oakland Aviation Museum

The Oakland Aviation Museum, founded in 1981 is a non-profit organization, creates an experience where West Coast aviation history comes alive through exhibits featuring simulators, research libraries and display aircrafts. The goal of the museum is to educate visitors about the evolution of aviation through the preservation of aircrafts and artifacts. Furthermore, the museum seeks to celebrate aviation history and technological advancements while sparking interest in the community.

Amelia Earhart

The museum thrives on its collection of artifacts and exhibits featuring influential pilots, most notably, Amelia Earhart. The design objective of Studio 187 is to create a comprehensive, immersive and emotive experience with participatory technology, under a limited budget. The goal of the exhibit is to increase interest in aviation and aviation history through the exploration of Amelia’s life using a variation of design techniques to enhance visitor experience.

Amelia Earhart

Exhibition Brief

Theme:

Amelia Earhart & Her Last Flight

Venue:

Oakland Aviation Museum

Date:

Spring 2015

Size of Space:

20 feet wide x 10 feet high x 8 feet deep

Audience:

General public (local and tourist) interested in aviation and aviation history and students studying heroes and heroines.

Exhibition Big Idea:

Aviation pioneer and hero, Amelia Earhart’s final flight left from Oakland Airport.

Exhibition Content (proposed):

Amelia Earhart has a unique connection to the local history of Oakland, California. Her final flight, and second attempt to circumnavigate the globe, took off from Oakland Airport on July 2, 1937. Earhart and navigator Fred Noonan never made it to a refueling point at Howland Island and were declared lost at sea on July 19, 1937 following a massive sea and air search. While her disappearance has captivated worldwide attention ever since, Earhart is also known for her achievements and contributions.

Achievements and Contributions:

- 1. Earhart was a pioneering female pilot who drew notoriety and fame.
- 2. Earhart helped advance early aviation as a record setter.
- 3. Earhart helped advance the women’s role in aviation and the business of aviation.
- 4. Earhart was a lecturer and advocate of education, especially for women.
- 5. Earhart designed a line of women’s clothing and luggage.

Interpretation Objectives:

Visitors will explore the life of Amelia Earhart through a variety of access points and learn about the connection Earhart has to local history.

Objects and Content:

Personal artifact from Earhart, news clippings, photos, flight souvenirs and ephemera, route map. Also loaned objects (propeller, clothing, suitcase, etc.)

Conservation, Security and Insurance:

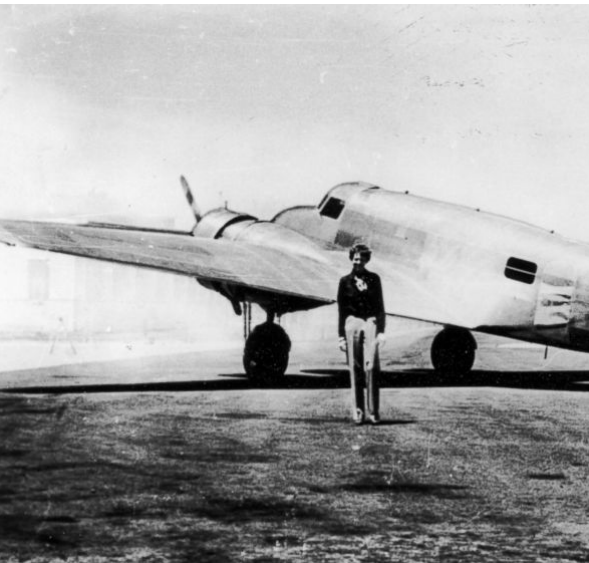
Refer to Object Collections Record and Condition Reports

Media and Graphics:

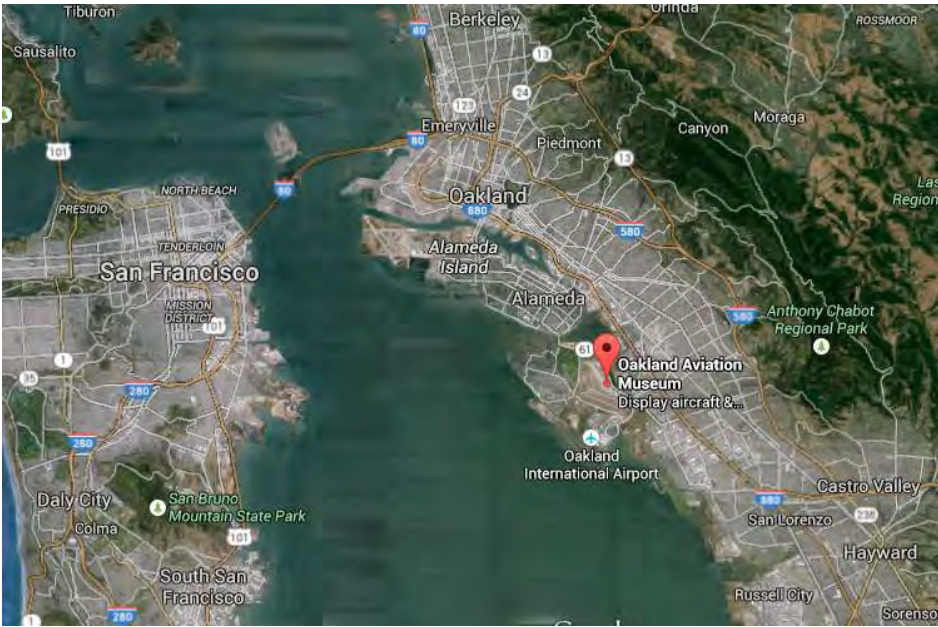
May include screen-based interface for visitor engagement with content; the map of Pacific with flight route, planned and attempted; and the historic film footage of Earhart at Oakland Museum.

Collaboration:

A collaboration of the Oakland Aviation Museum and John F. Kennedy University Museum Studies and University of California Davis Design Department, Studio 186.



Site Analysis



Located at 8252 Earhart Road, Oakland, CA, the Oakland Aviation Museum sits along the Old North Field bordering the existing Oakland International Airport. The Old North Field was the departure point for Amelia Earhart’s final journey in an attempt to fly around the world in 1937, making it an optimal location for an exhibit highlighting her accomplishments. The building itself was the original site of the Boeing School of Aeronautics and contains two large open areas which feature their main aircrafts. These areas include the Hangar room at 4,012 square feet, and the Gallery room at 1,000 square feet. The rough dimensions of this installation are 10 feet high by 25 feet in diameter. Therefore, the existing Amelia Earhart exhibit location, which is 20 feet wide by 10 feet high by 8 feet deep, does not give sufficient space to implement our design while meeting safety code regulations. Consequently, the design team is exploring other spacial options throughout the museum which would be more conducive to the exhibit.

Content Analysis



In designing an immersive and educational exhibit, it is essential to have an all-encompassing representation of not only Amelia’s flight accomplishments, but also her influence as a female role model and her connection to Oakland. Although Amelia was a record-setting pilot and helped make advances in early aviation, she should also be noted as a designer of women’s clothing and luggage, a lecturer and advocate of women’s education and pioneer in the role of women in aviation. With Oakland serving as the departing location of Amelia’s final flight, it is also important to pay tribute to her distinctive connection to the site where the museum stands today. Through the integration of fourth screen media, tactile displays, participatory and sensory experiences and a cohesive graphic language, the exhibition is able to engage museum goers of all types and serve as a point of connection between the present and the past. By exploring Amelia’s influence through multiple lenses, visitors will be able to experience the content in a unique and engaging way.

Marketing Analysis

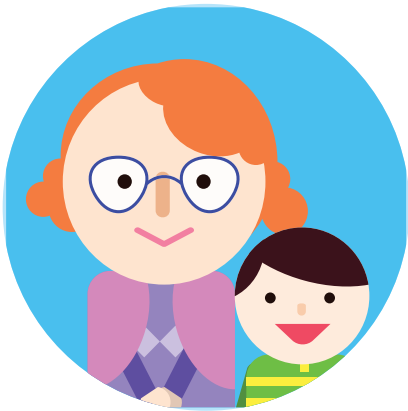


The key element to promoting the “Flying Through Expectations” Amelia Earhart exhibit will be spreading awareness of the installation throughout the local Oakland and Bay Area schools, Oakland International Airport, and the surrounding area. By displaying advertisements at the Oakland Airport terminals and rental car areas, the exhibition can reach out to people who are just coming into town as well as those waiting to catch a flight or have a long layover. To appeal to the people already in the Bay Area, the exhibition would directly contact the various school districts, like Oakland Unified School District and Berkeley Unified School Districts, to provide them with current information on the Oakland Aviation Museum and Amelia exhibit to coincide with their curriculum. Additionally, OAM can gain profit through selling Amelia merchandise, like museum posters, shirts, pins, and copies of the interior vignette videos. By promoting these items, users can be engaged in a post-visit experience, which would further advertise the museum and history of aviation.



Charlie

Charlie (36) is photographer from Boston. His flight arrives at the Oakland Airport, and there is a four-hour layover so he sets off for the Oakland Aviation Museum. He doesn't care much for large crowds. Charlie decides to pay the exhibit a visit, and has a couple of hours to spare and doesn't have the time for a full guided tour.



Linda and Noah

Linda (36) works as a law assistant in Sacramento. Her son, Noah (4), loves airplanes. Linda is not a regular museum goer, but she plans a trip to the Oakland Aviation Museum. Noah wants to be a pilot someday too and go on adventures. Noah gets distracted very easily; he's very energetic and likes to climb things.



Kylie

Kylie (11) from Claremont Middle School in Oakland, is visiting the Oakland Aviation Museum Core class. Her class has been studying Amelia Earhart for the past two weeks. Kylie doesn't know about the 1920's or much about Amelia's accomplishments outside aviation. Her class assignment is to write paper on what makes Amelia a hero. Kylie learns best visually, has never been in a plane, and is very shy. Kylie is an only child and comes from a lower social-economic background.



Jones Family

Kevin Jones is a single father of a daughter, Sarah (7), and son, Ryan (16). They live in Alameda. Kevin's father was a Japanese American and served in the US Air Force as a pilot. Kevin is curious about the aviation museum and the connection it has to his father. He is hoping to gain a better understanding of what pilots are like. Sarah spent a week learning about planes and airports in class. Ever since then she has been in to everything planes, and is excited to explore the museum. Ryan is at that age where it's not cool to be interested in anything except girls. He is not all that excited about the museum, but he is aware that his grandpa was in the Air Force.

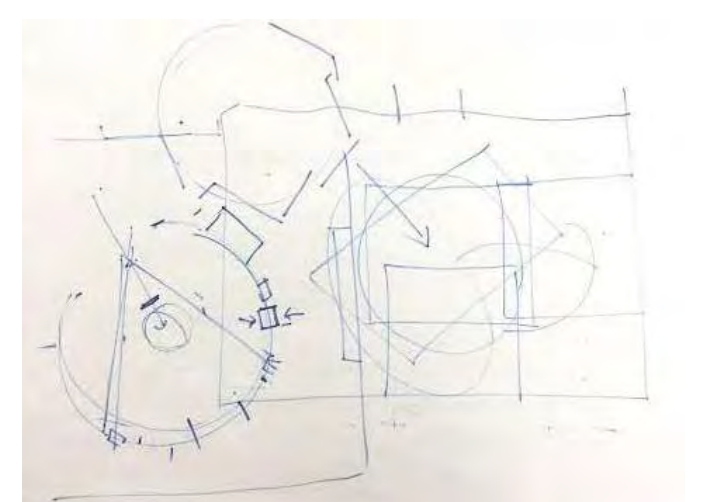
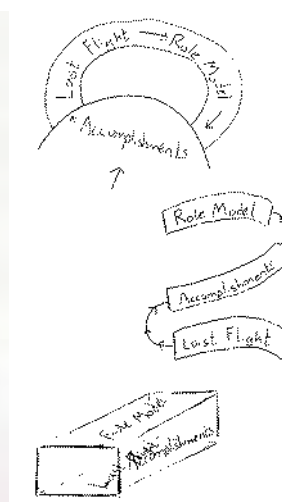
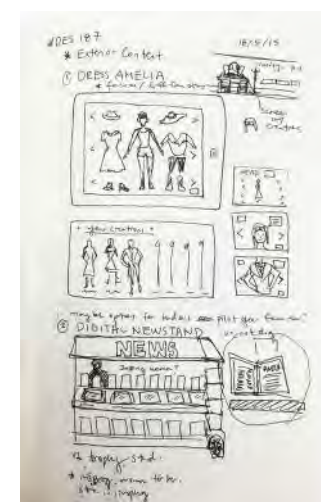
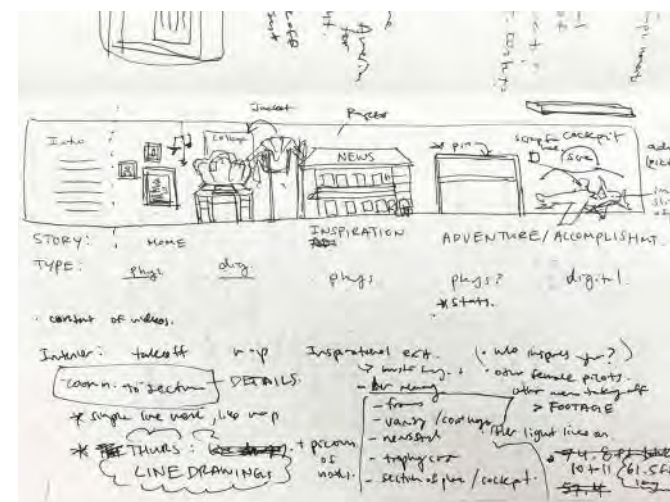
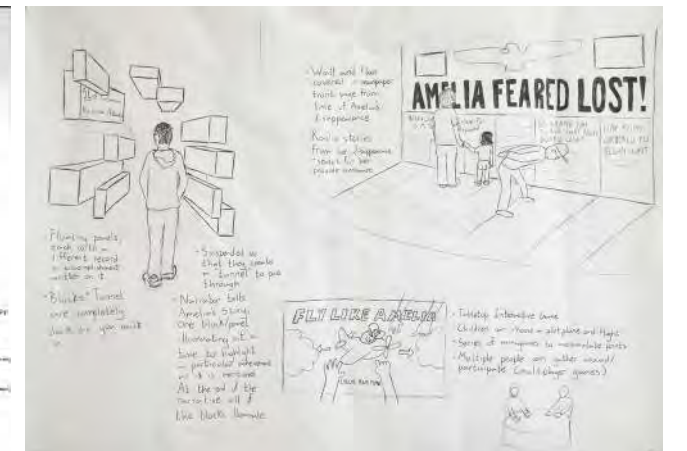
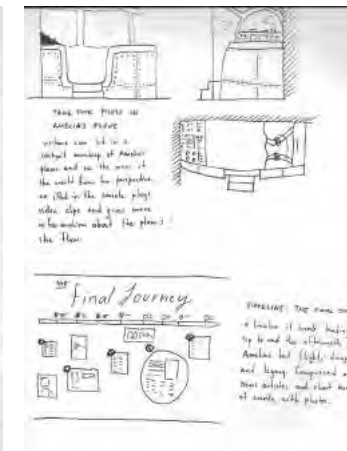
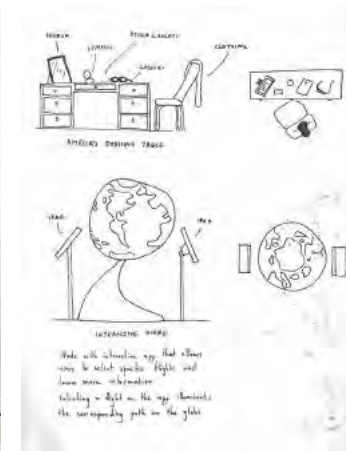
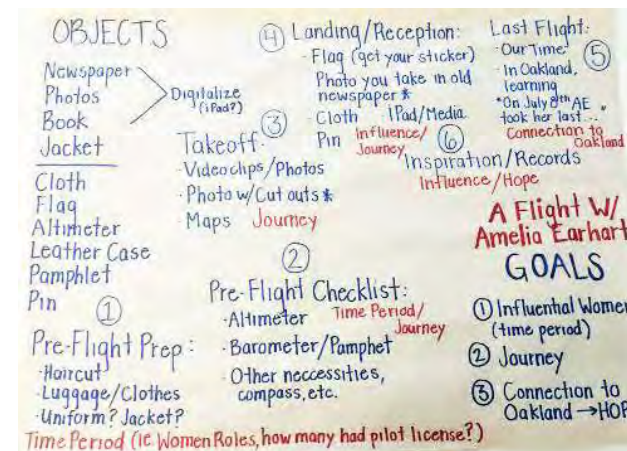
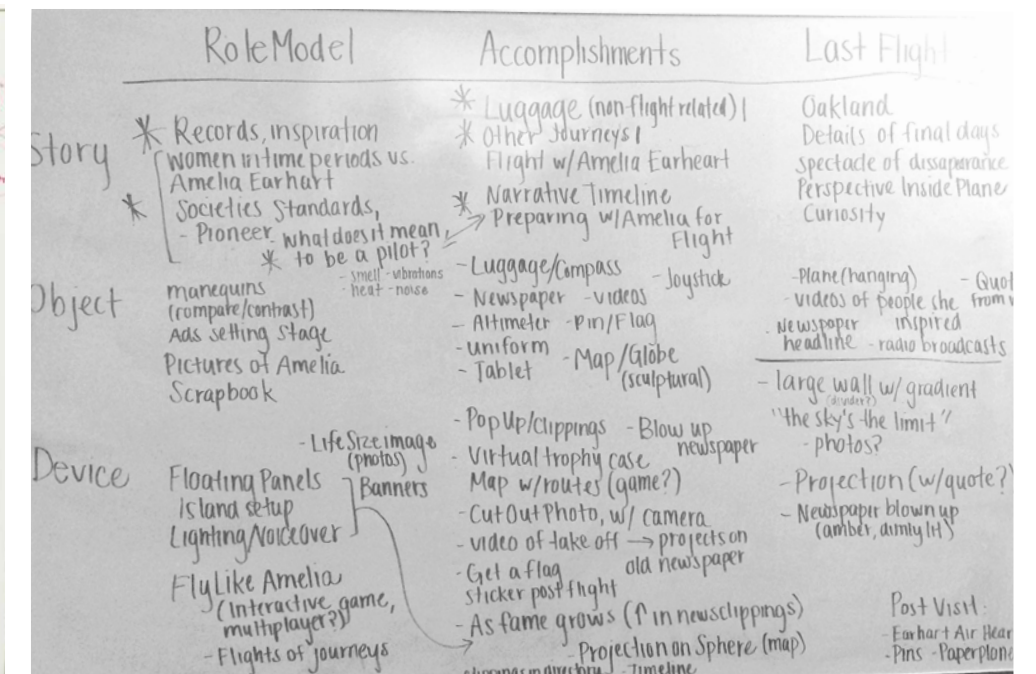
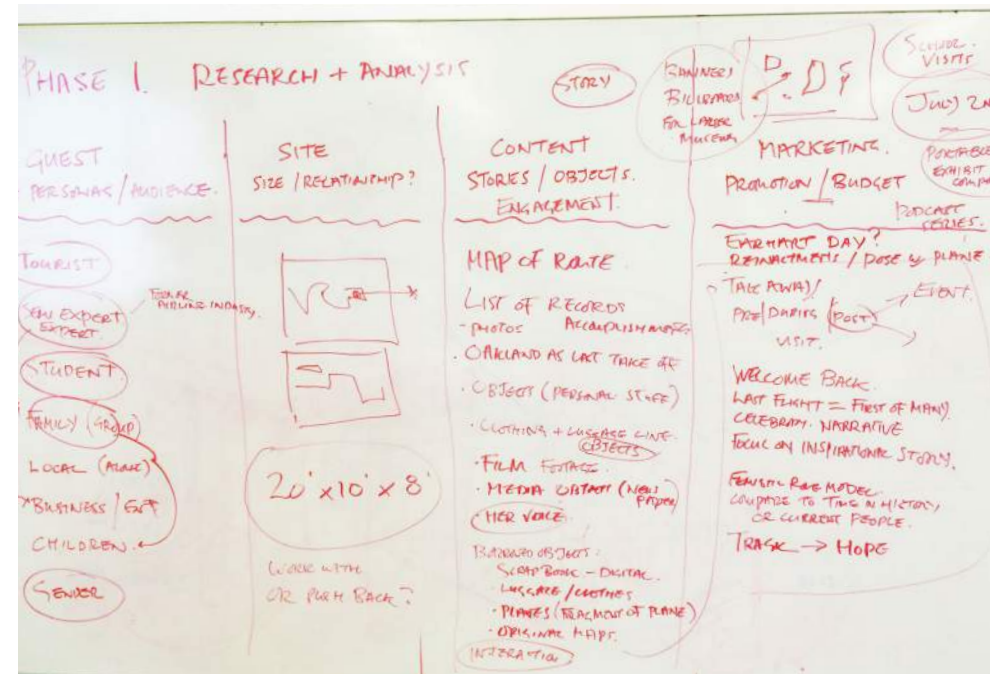


Maverick

Maverick (68) is an air force veteran in a wheel chair. He lives in Marin and uses his county's disability shuttle service to visit new places in the Bay Area. He has flown planes before, is passionate about flight statistics and technology, and is a frequent visitor of other aviation museums in California. He values informational and logical learning as well as linguistic and verbal; he frequently attends free lectures and discussions. He is a bit of a loner but will engage in deep conversation with other experts. He is not one to notice design--lighting, colors, layout--but like anyone can be influenced by the method a story is told. It is extremely important to him that the exhibit is wheel chair accessible and that he can view text and objects from a seated position—he has some trouble with his eyesight.

Initial Sketches and Ideation

The initial step to designing the exhibit was creating hand sketches and brainstorming guest, site, content and marketing analyses as a team. Our design team developed a strategy for our research and analysis, categorized our concepts by story, and produced sketches of spatial and media mockups. Our team referred back these sketches and ideations throughout our design process to create a cohesive and goal oriented exhibit.



1930's Magazine Covers

The 1930's magazine covers and spreads show both neutral tones as well as the blue, yellow, and red that represent our accent colors.

Furthermore, the serif type for headlines inspired our own use of Caslon for a title and header font.



Amelia's Fashion Line

Amelia's fashion and clothes line primary focused on using neutral colors, from which the beige and creme neutral color palette were drawn from.



Amelia's Planes

The yellow plane is representative of the first plane purchased by Amelia, while the remaining metal planes helped derive our neutral-gray primary color scheme.



Kinner Airster - "The Canary"

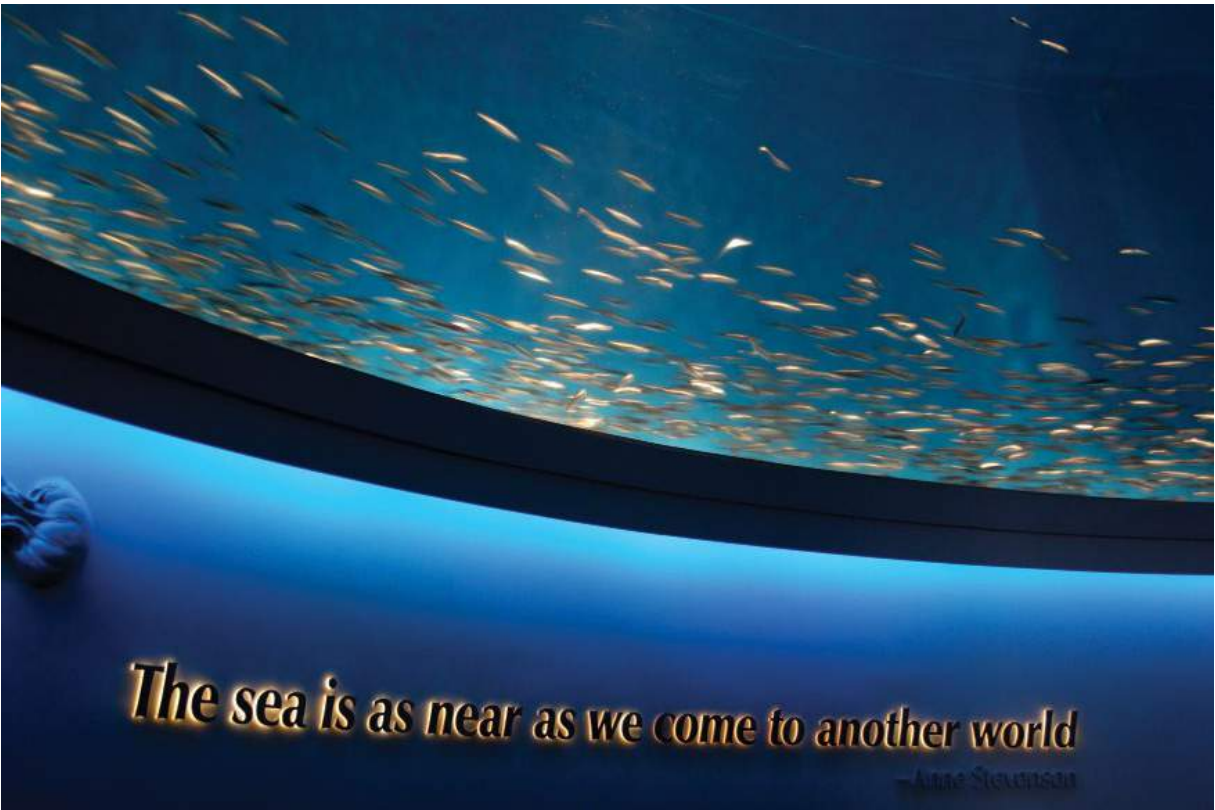


Vought F4U Corsair



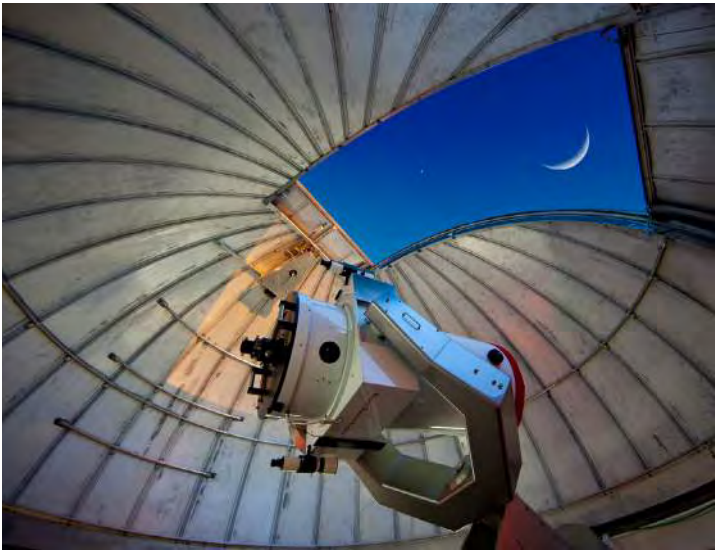
Museum Exhibit Titles

Inspiration for 3-dimensional, back lit lettering used in the exhibit title panel and A panel title comes from a variety of existing museum exhibit typography designs. The Magritte example shown in the bottom right was the primary inspiration for the exhibit title. The other examples gave us a more detailed look into the form of 3D block letters with colored illumination.



Celestial Skyscapes

Amelia Earhart flew where no one else dared to and her light and legacy still live on today—like stars in the night sky. Inspiration for the structure was thus taken from celestial architecture like domed cathedrals and observatories. Like Amelia, these structures inspire awe and boundless possibility.



Cylindrical Spaces

Though Amelia Earhart’s journey to circumvent the globe had no clear end, her inspiration cycles through generations of pioneers in aviation. Cylindrical structures capture the never-ending quality of a circle and inspire the visitor to see how her past connects to the present, rather than dwelling on one just point of her journey.



Circular Seating

To pair with a cylindrical shape, circular seating was a natural choice for the exhibition interior. This form allows for a three hundred and sixty degree view of the exhibit and a central point for quiet observation or making new connections.



Exhibition Design Firms

The work of exhibition design firms like Local Projects, Kossmann Dejong, and Stephen Feber includes a poignant use of projection (lights, video, still images, and typography). They transport the passive viewer into worlds full of activity, color, light, motion, and information.

Light and Dark

The use of light projected in a dark space is powerful. The dramatic contrast pulls the viewer into the space—like a moth to a flame. Light has a similar ability to music, by fading, flickering, beaming, and breaking it can pluck at the viewer’s less conscious emotions.

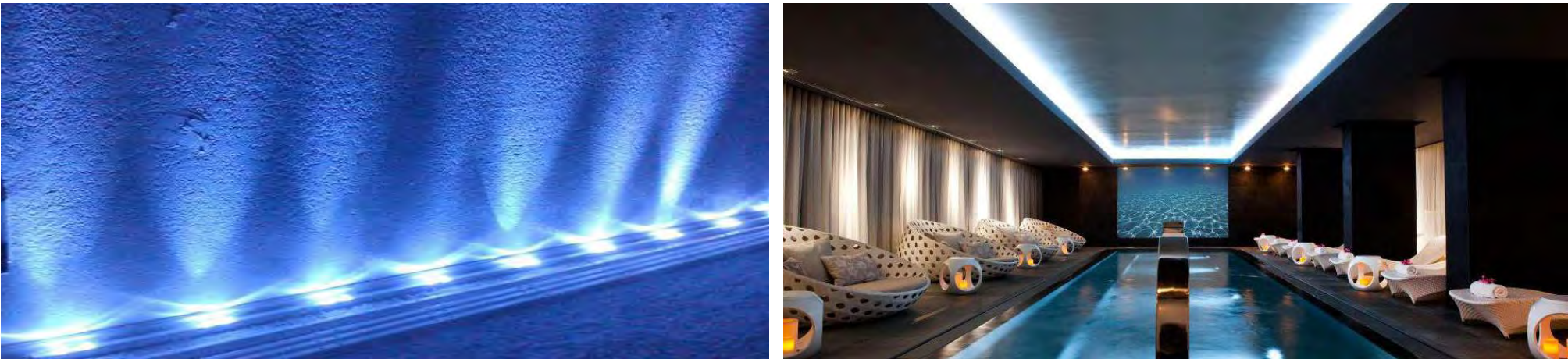
Emotion and Information

The range of projected graphics in an exhibition space falls on a spectrum between highly informational and text driven to emotional and abstract image fueled. The best exhibitions tend to do a bit of both, giving the viewer clear information while using emotive imagery as a vehicle for greatest impact.



Ambient Lighting

Ambient lighting provides the museum exhibition with overall illumination, without extreme brightness or glares. Furthermore ambient lighting is used to create a consistent lighting for safety and overall sight quality.



Task Lighting

Task lighting is to help aid specific tasks throughout the museum exhibit like reading smaller, caption panels, and making photos and news clippings easier to see. Additionally the light shouldn't create glare, but also shouldn't strain eyes through it's brightness. These images show how lighting tracks can help with task lighting.



Accent Lighting

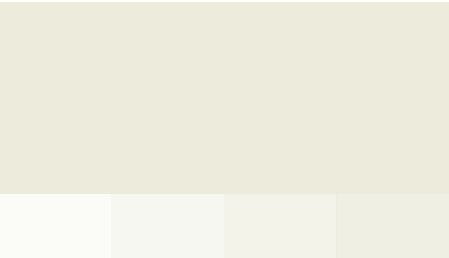
Accent lighting adds drama to the museum exhibit interior and exterior. It draws the eye to specific key artifacts, like the altimeter and flag. To be effective, the accent lighting's strength will be nearly three times higher than the general lighting surrounding it.



Primary Color Palette

The primary color palette is used for panel backgrounds. Pantone 433 C should be used for the title, exterior section titles (A panels), exterior captions (C panels) and interior all panels. Pantone P 3-9 C should be used for exterior sections (B panels).

PANTONE P 3-9 C



CMYK		HEX/RGB	
C	0	HEX	#EDEBDC
M	0	R	237
Y	10	G	235
K	6	B	220

PANTONE 433 C



CMYK		HEX/RGB	
C	71	HEX	#272727
M	65	R	39
Y	64	G	39
K	68	B	39

Secondary Color Palette

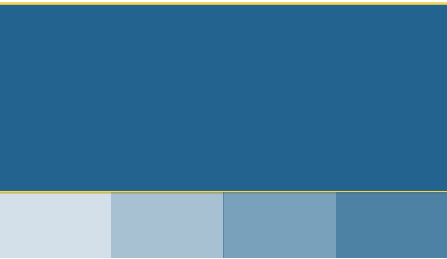
The secondary color palette is used with discretion for accent lighting for the title panel, the background of the exterior, interior lighting and select graphics.

PANTONE 128 C



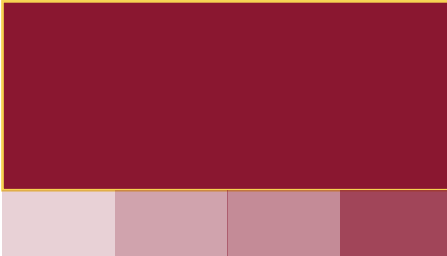
CMYK		HEX/RGB	
C	4	HEX	#F7D250
M	14	R	247
Y	80	G	210
K	0	B	80

PANTONE 647 C



CMYK		HEX/RGB	
C	90	HEX	#20628E
M	60	R	32
Y	24	G	98
K	5	B	142

PANTONE 202 C



CMYK		HEX/RGB	
C	29	HEX	#891630
M	100	R	137
Y	76	G	22
K	30	B	48

Adobe Caslon Pro Semibold Italic

Adobe Caslon Pro Semibold Italic is used exclusively for the exhibit title panel and A panel title text. The Caslon typeface is the chosen serif typeface to emphasize headers due to its similarity to typefaces used in 1920’s and 30’s magazines.

Adobe Caslon Pro Semibold

Adobe Caslon Pro Semibold is utilized for the exhibit title panel, A panel subtitles, and B panel titles. It is an ideal header typeface to be paired with Franklin Gothic due to the fact that they possess stylistic contrast while maintaining proportional elegance.

Franklin Gothic Demi

Franklin Gothic Demi applicable for C panel titles. Franklin Gothic is the chosen sans-serif typeface for body copy and select titles due to its legibility. Additionally, Franklin Gothic saw a surge of popularity in media and print applications in the 1930’s, following its creation in the early 20th century.

Franklin Gothic Book Italic

Franklin Gothic Book Italic is employed for C panel artifact detail. The italic variation is used in order to distinguish text describing material, time period, and original location of an artifact, from body copy describing the object in greater detail.

Franklin Gothic Book

Franklin Gothic Book is the chosen typeface for A, B, and C panel body copy, as well as B and C panel captions. Its high degree of legibility makes it an ideal typeface for large amounts of text in body copy.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!\$#&%@?

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!\$#&%@?

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!\$#&%@?

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!\$#&%@?

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!\$#&%@?

Title

Used for main exhibit entrance.
The main letters will be 3-d
with an illuminated background,
with the remaining text applied
directly on panel.



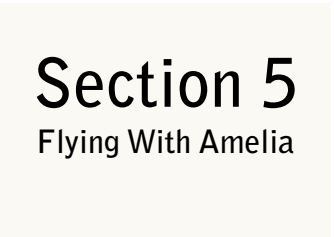
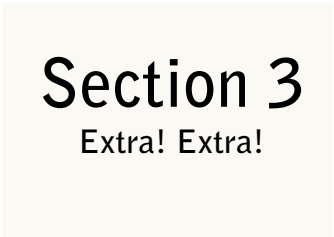
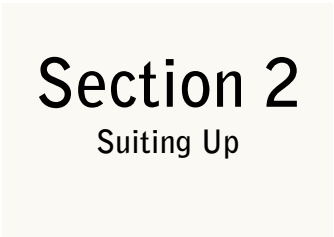
Main Intro (A Panel)

Used for exhibit introductions
(exterior & interior.) Main
headings, excluding dates, are 3-D.
Remaining text applied directly.



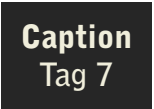
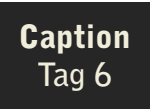
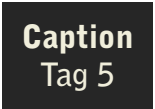
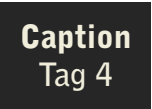
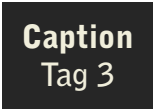
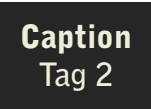
Sections (B Panel)

Used for sub-sections that are
specified to the right, text applied
using direct application.



Captions (C Panel)

Used for photo and object labels
throughout exhibit. Will be on a
separate acrylic plaque.





amelia

FLYING PAST EXPECTATIONS

Title:
Adobe Caslon Pro
Semibold Italic
Cap height:18.4 inches, X-height: 11.4 inches

Subtitle:
Adobe Caslon Pro Semibold
Cap height: 2 inches



Title:
Adobe Caslon Pro
Semibold Italic
550pt, Cap height: 4.5 inches

NB:
This is not a proposed design, it
is only a typography demonstration.

The

Title:
Adobe Caslon Pro Semibold
175pt

Lorem ipsum dolor sit amet, te
eam appareat scriptorem, cu his
facere nemore. Cu vix fugit summo,
pertinax iudicabit dissentiunt ei
mel.

Body:
Franklin Gothic Book
35pt

This is caption copy
for any images.

Caption:
Franklin Gothic Book
13pt

NB:
This is not a proposed design, it
is only a typography demonstration.

AMELIA EARHART’S FLIGHT GOGGLES

Aviator goggles, early 1930’s
Leather, metal

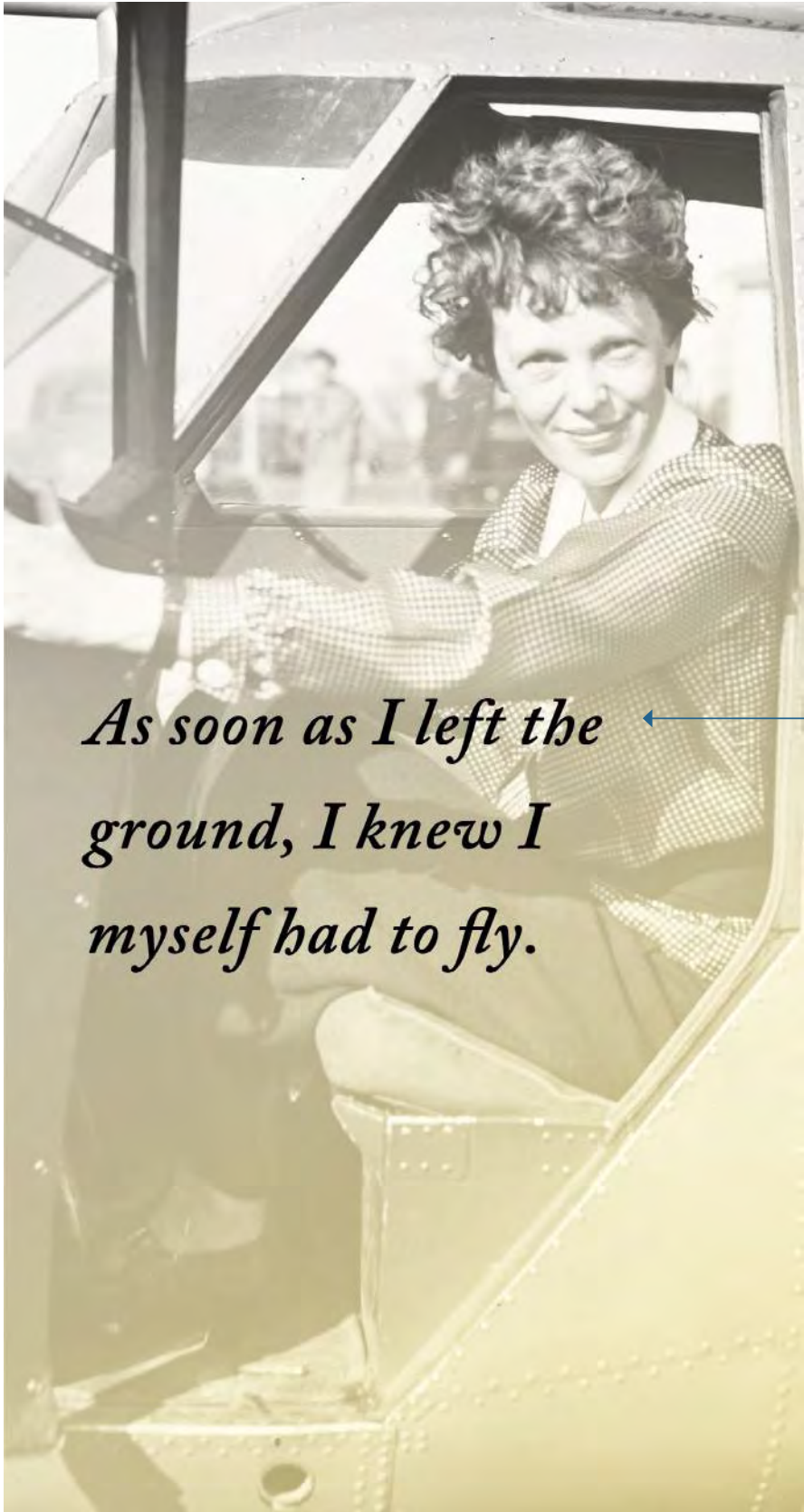
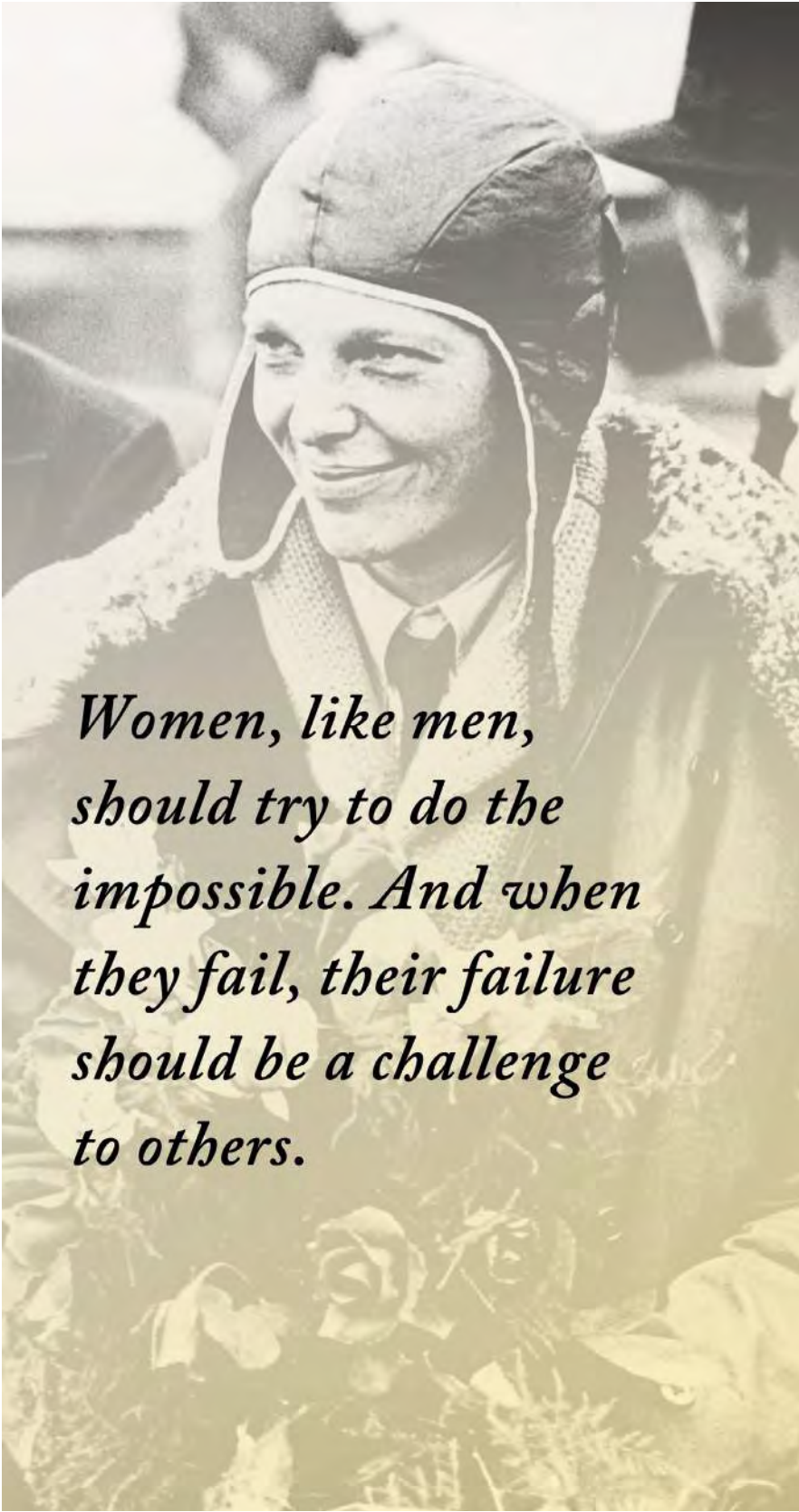
Lorem ipsum dolor sit amet, te eam appareat scriptorem, cu his facer nemore. Cu vix fugit summo, pertinax iudicabit dissentiunt ei mel. Nec movet eligendi concludaturque eu. Id nusquam platonem adversarium quo. Natum nonumes al-
bucius ne has, etiam ancillae inciderint ea sea, id sed simul pertinax abhorreant. Eum justo exerci-
te, ubique menandri vulputate id pro. Usu agam postea assueverit et.

The Museum of Aviation: 0003DKL

Title:
Franklin Gothic Demi
32pt
Artifact detail:
Franklin Gothic Book Italic
24pt
Body:
Franklin Gothic Book
24pt

Caption:
Franklin Gothic Book
13pt

NB:
This is not a proposed design, it
is only a typography demonstration.



Quote:
Adobe Caslon Pro
Semibold Italic
X-height: 3.58 inches
Starting at 4.5 feet from the
top vertically, left justified

NB:
This is not a proposed design, it
is only a typography demonstration.



Typography:

Adobe Caslon Pro
Semibold Italic

Dimesions:

Cap height: 18.4 inches
X-height: 11.4 inches

Illuminated Background:

Yellow LED lights

Materials:

Dark Matte Metal,
possibly aluminum or steel



Typography:

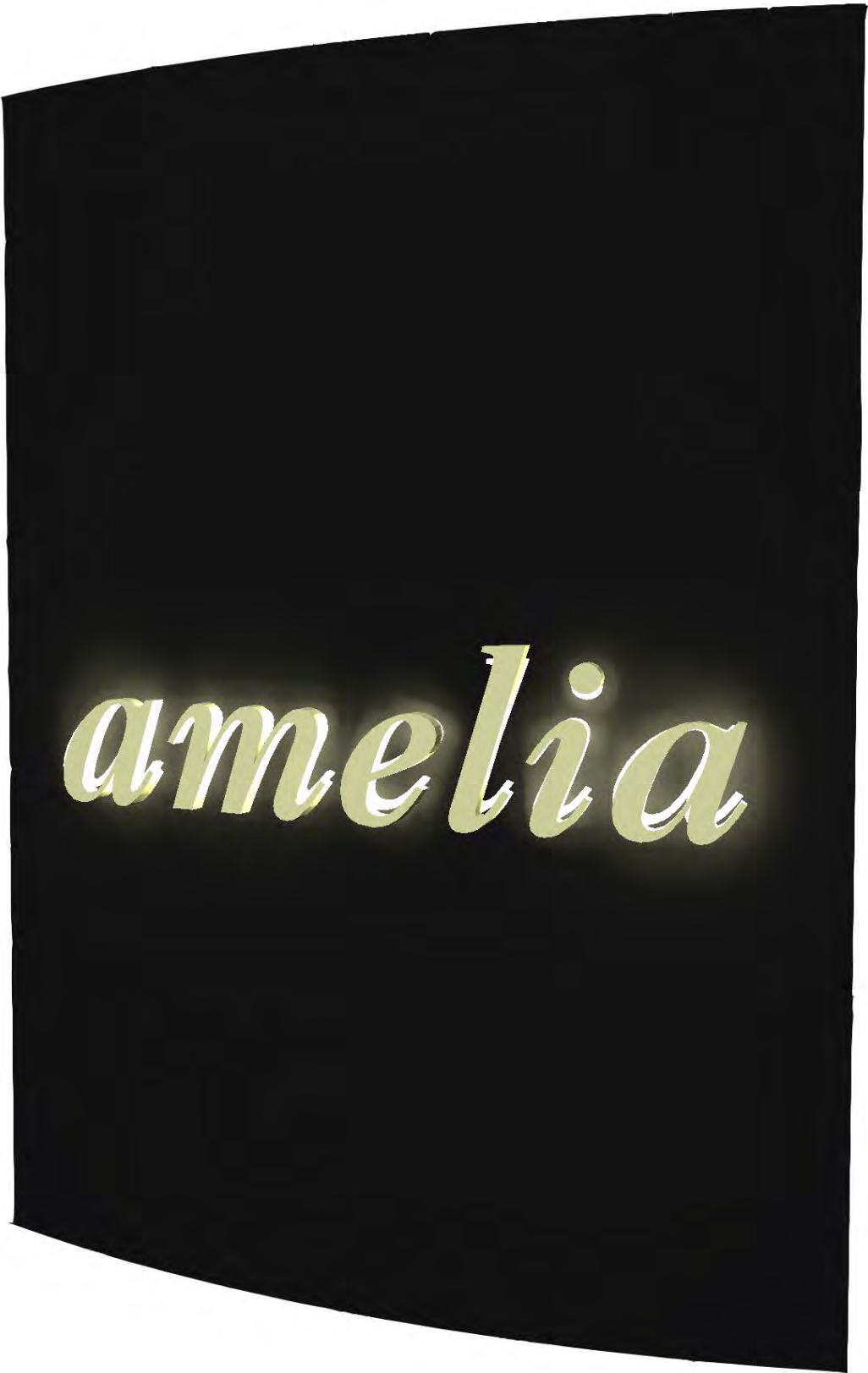
Adobe Caslon Pro
Semibold Italic

Dimesions:

Cap height: 8 inches
X-height: 5 inches

Materials:

Metal, possibly aluminum
or steel.





Title:
Adobe Caslon Pro
Semibold Italic
500pt, Cap height: 5 inches

NB:
This is not a proposed design, it
is only a typography demonstration.

1897

Subtitle:
Adobe Caslon Pro Semibold
150pt

Lorem ipsum dolor
sit amet, no sea

Body:
Franklin Gothic Book
75pt

THE

Title:
Franklin Gothic Demi
Capitalized
384pt

NB:
This is not a proposed design, it
is only a typography demonstration.

Oakland

283

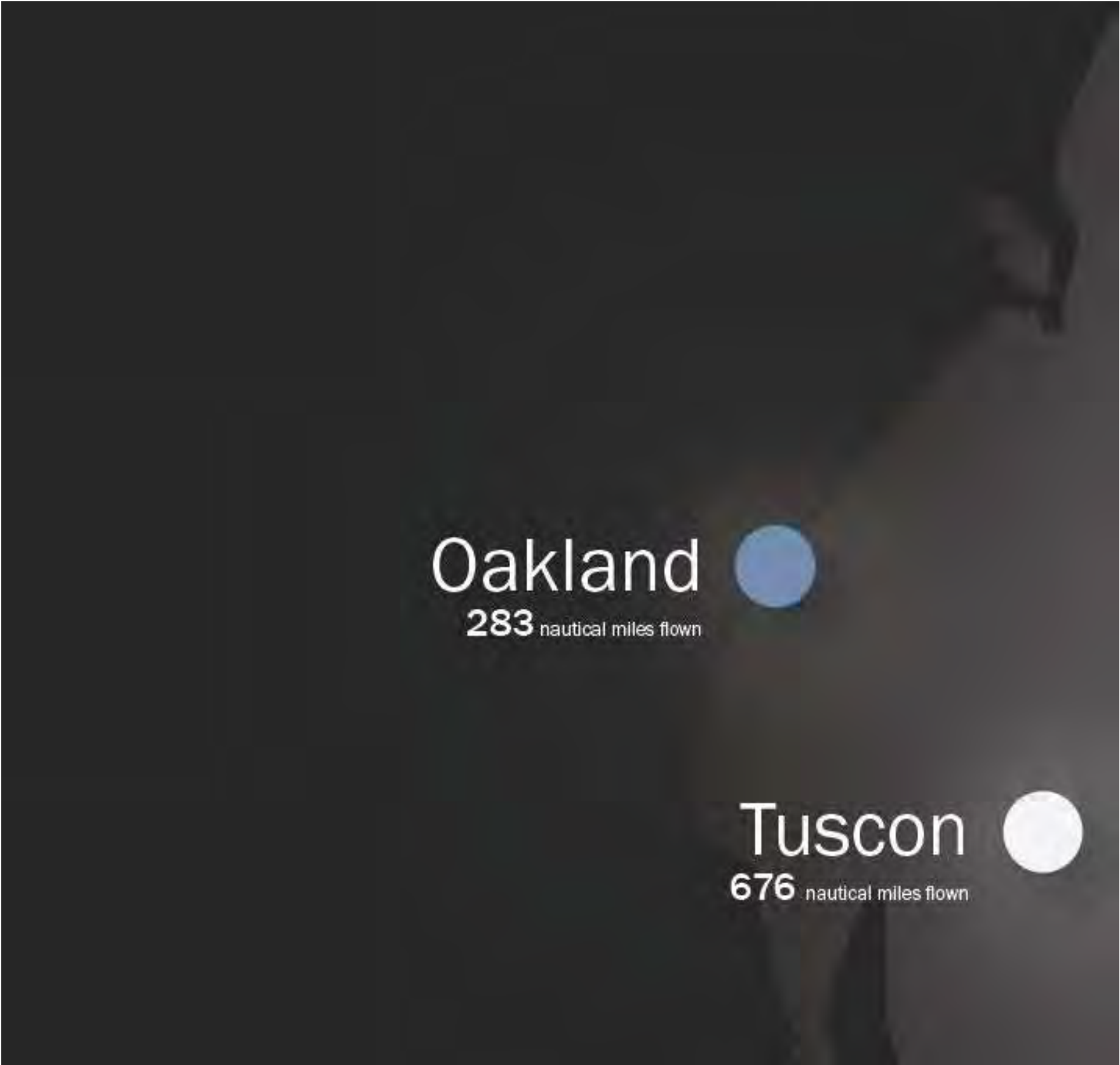
nautical miles flown

Location:
Franklin Gothic Book
144pt

Nautical Miles Number:
Franklin Gothic Demi
72pt

Nautical Miles Text:
Franklin Gothic Book
36pt

NB:
This is not a proposed design, it
is only a typography demonstration.



Typography demonstration of interior projections of location names on map.





Titles:
Franklin Gothic Bold



Subtitles:
Franklin Gothic Bold

Colors

Blue (and corresponding tints)

Red (and corresponding tints)

Yellow (and corresponding tints)

All colors are from the chosen exhibit color palette. Furthermore, the gradient transitions from blue to yellow to red, back to yellow and finally blue again. The gradient is subtle, so not to distract the audience from the information.

Additionally, the colors will appear more muted, as the panels will be lit with task lighting, greatly enhancing their prominence.

Graphic Pattern

The graphic pattern features an artistic representation and interpretation of Amelia and her journey, contrasting the straight-forward informational text and objects in the panels. Subtle topography lines mimic the natural features of an area from an aerial view (as in Amelia from her plane.) Furthermore, the brick lines serve to embellish the “Extra! Extra!” newstand, bringing about a 1930’s vibe. Overall, most of the colorful pattern is covered by the large, educational panels, making the illustration become a background.

Additionally, the smooth curves of the lines complement the sans serif, Adobe Caslon Pro, typeface, which headlines the five main panel sections.

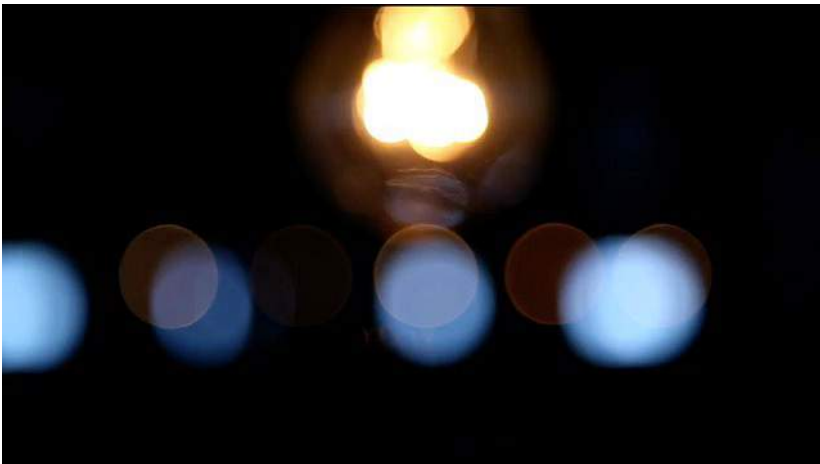


Video Treatment

In final cut pro the whole video (archival and stock footage) was treated with “auto enhancements” and stylized with the “vignette effect”. Until the last clip (of Sally Ride’s Challenger take off) every clip is in black and white.

The main type is treated with the “feature effect” slowed down to 50% speed.

Unedited Version



Edited Version



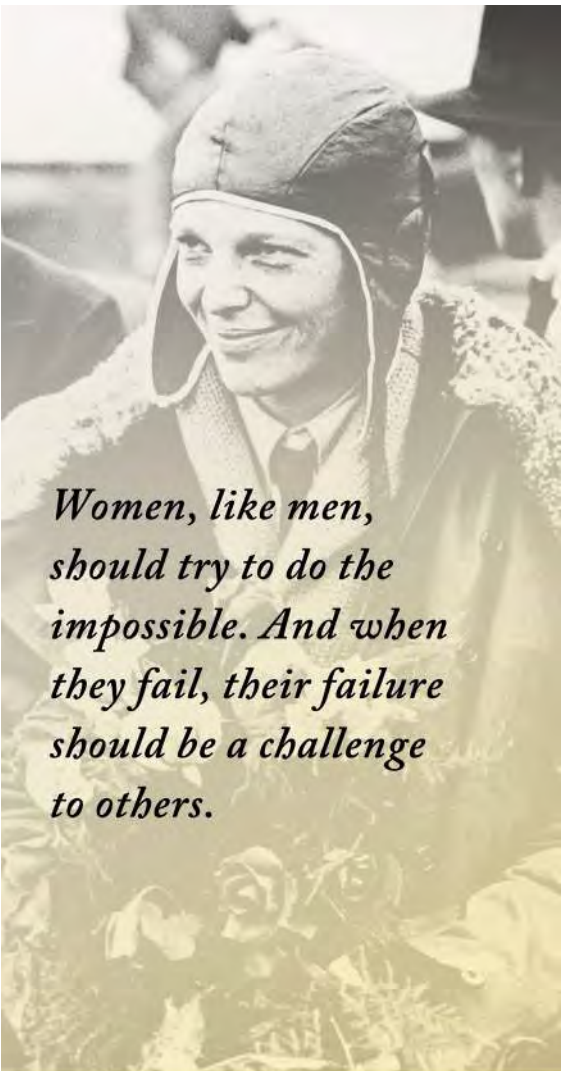
Quote Panel Image Treatment

In Adobe Photoshop the black and white images (archival photographs) were treated with a “gradient overlay” effect, therefore tinting the image yellow, following the exhibit’s color palette. Additionally, the images have a “curved” effect, enhancing the lighting and highlights of the photo. Lastly, the text was added using “bevel and emboss” features.

Unedited Version



Edited Version

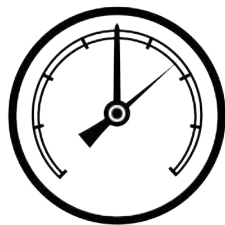




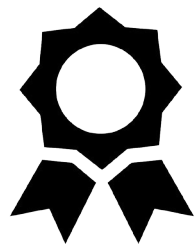
Transcontinental:
Symbol used to represent the women’s
transcontinental flight time record.



Airspeed:
Symbol used to represent the women’s
airspeed record.



Altitude Gauge:
Symbol used to represent the autogiro
altitude record.



Ribbon:
Symbol used to note Amelia’s feats
which she was the first pilot to achieve.



Medal:
Symbol used to show Amelia’s National
Geographic Socitey Award.

Gateway To Today:
Symbol used to distinguish an aspect of the exhibit that had an influence on events following Amelia’s life.





LED Strip Lights



BENQ Projector



40" Monitors



Single LEDs



Apple iPad



Speakers



Vinyl Transfers



Track Lights



Pilot Headset

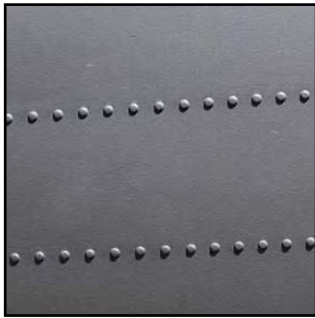
Audio Visual Materials

The materials that are being used for the audio visual component of the exhibit are there to either enhance, or sometimes be hidden from the audience’s experience.

The lighting is very minimal and highlights only what is necessary. The lights that have been chosen are all LEDs, so that they are both sustainable and long lasting. The Strip lights are very small and are in charge of task lighting which will help the audience dive into the exhibit, and be guided without distraction.

Listening to exhibits is key. The speakers are small enough to fit within the structure, but also loud and clear enough to deliver a strong and articulate message.

With tight budget constraints, many of these costly tech items have friendly money-saving alternatives. This being said, the quality and durability of these objects are not always comparable to their expensive counterparts.



Riveted Aluminum



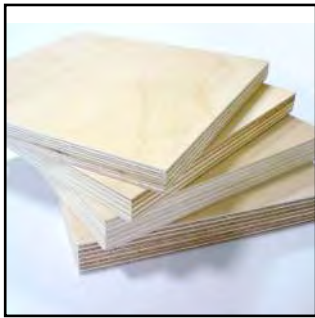
Vinyl



Grommets



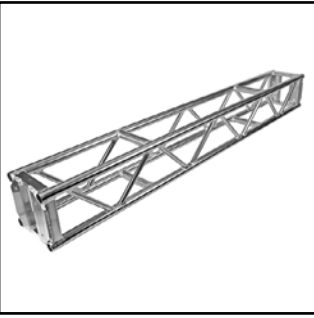
Acorn Nuts



Plywood



Aluminum



Trusses



Fasteners



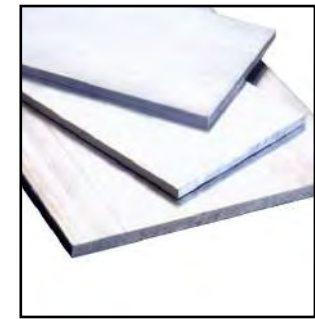
Canvas



L Brackets



Upholstery Foam



Flat Bar

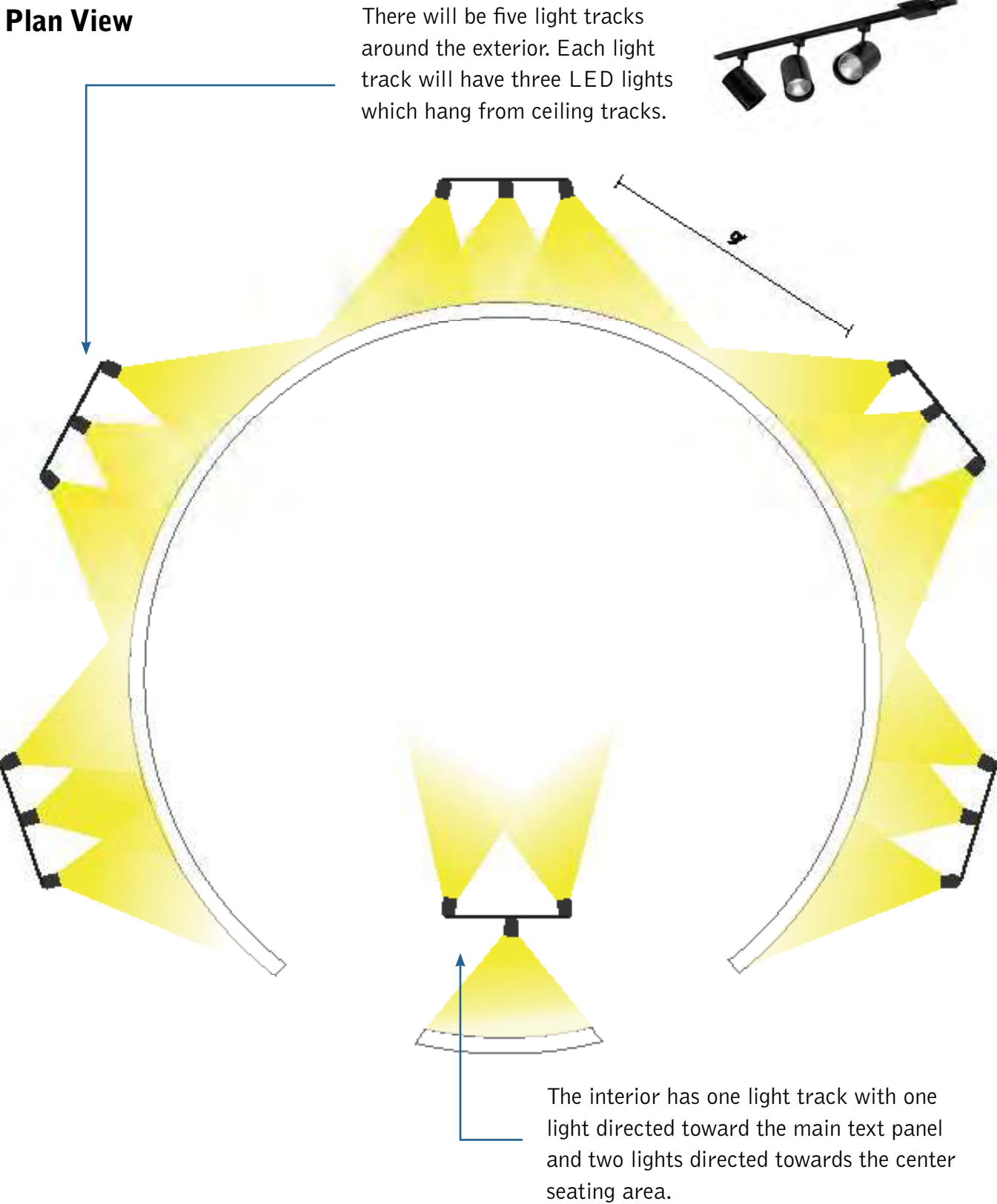
Structural Materials

When building the main structure, it was important to remember the time period. During the choosing process, materials were selected only if they were structurally sounds, time period accurate or had the ability to replicate the time period.

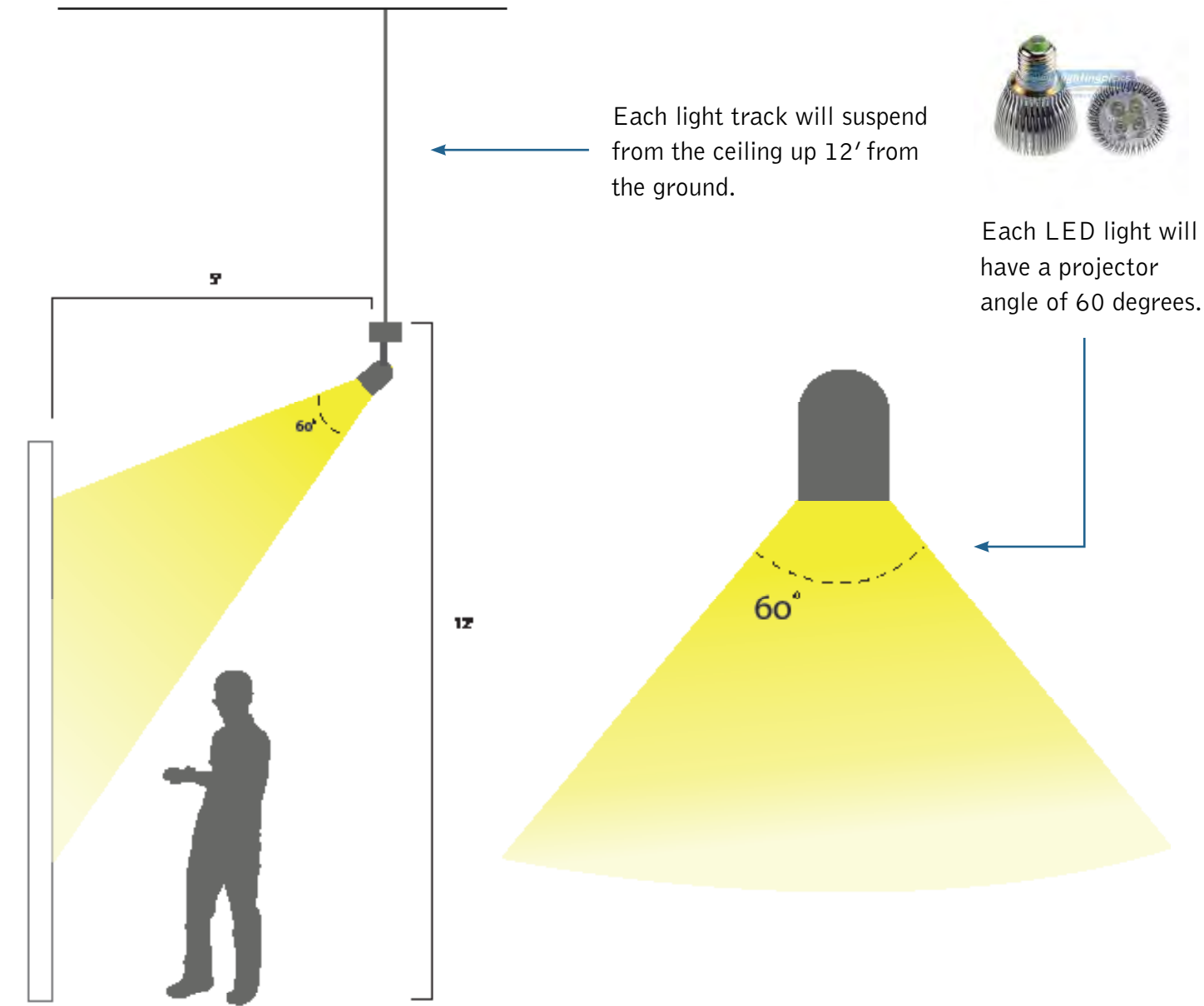
The Aluminum frame mimics the structures of some of the earliest airplanes, though the grid-like build expresses more than just that. It allows the audience to feel connected with the interior of the exhibits while being on the exterior. The frame also provides a modular, and versatile station that can be portable through out the museum.

Though we are no longer in the Twentieth Century, the materials chosen try to create the feeling as if you were. The leather, aluminum, canvas and wood come together with their edgy ways to make you fall into the experience of the exhibit, and help showcase the life of Amelia.

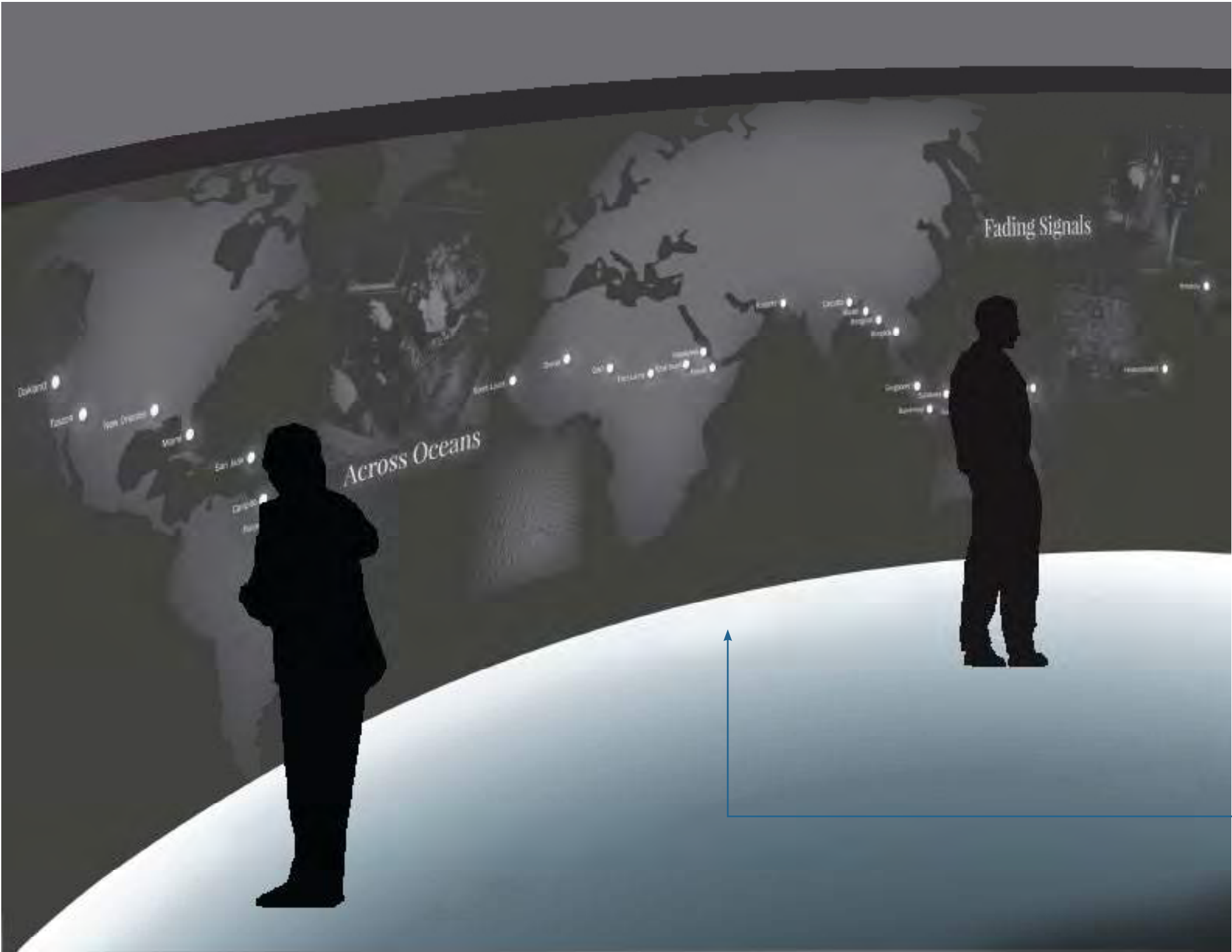
Plan View



Section View

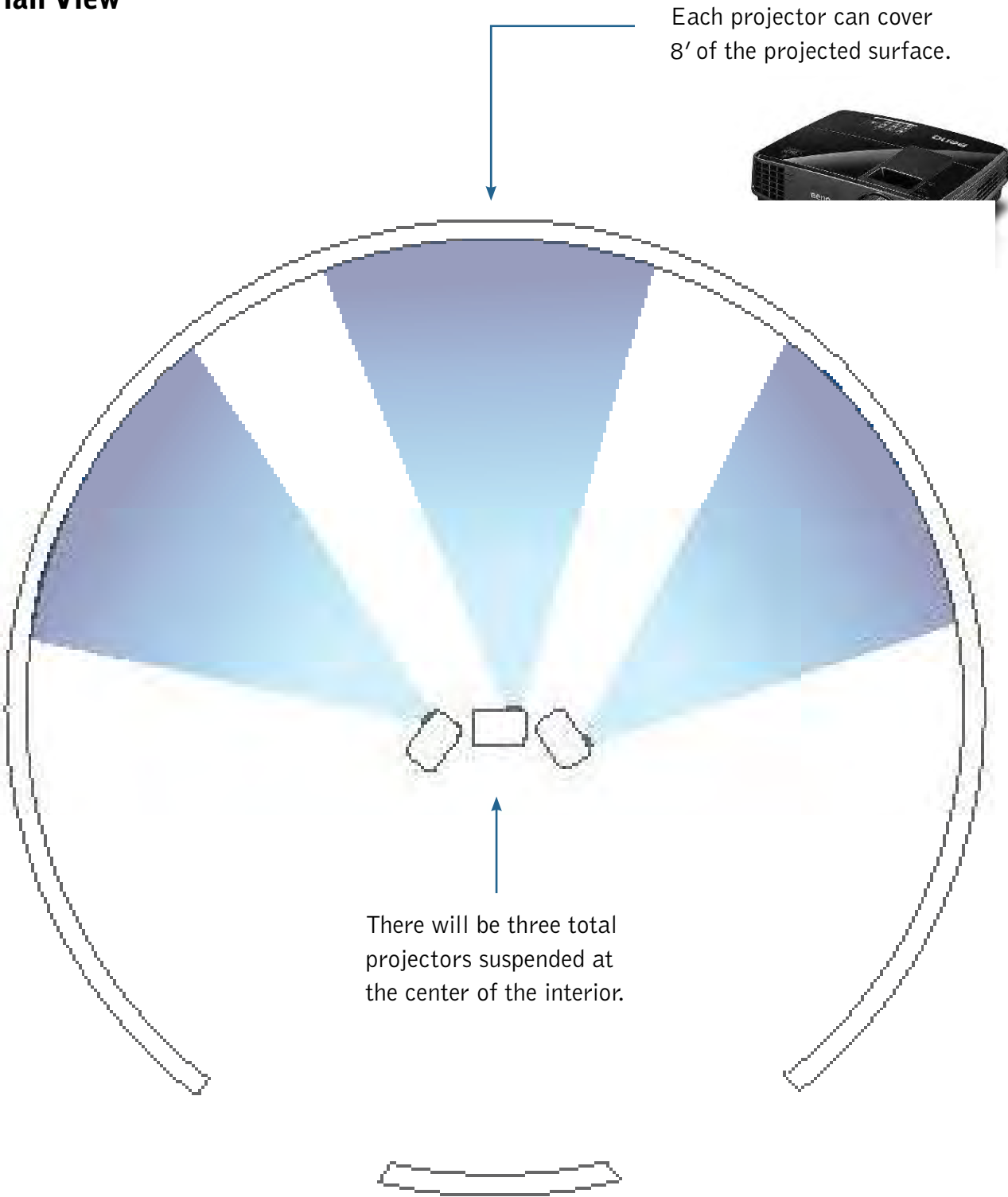


Interior

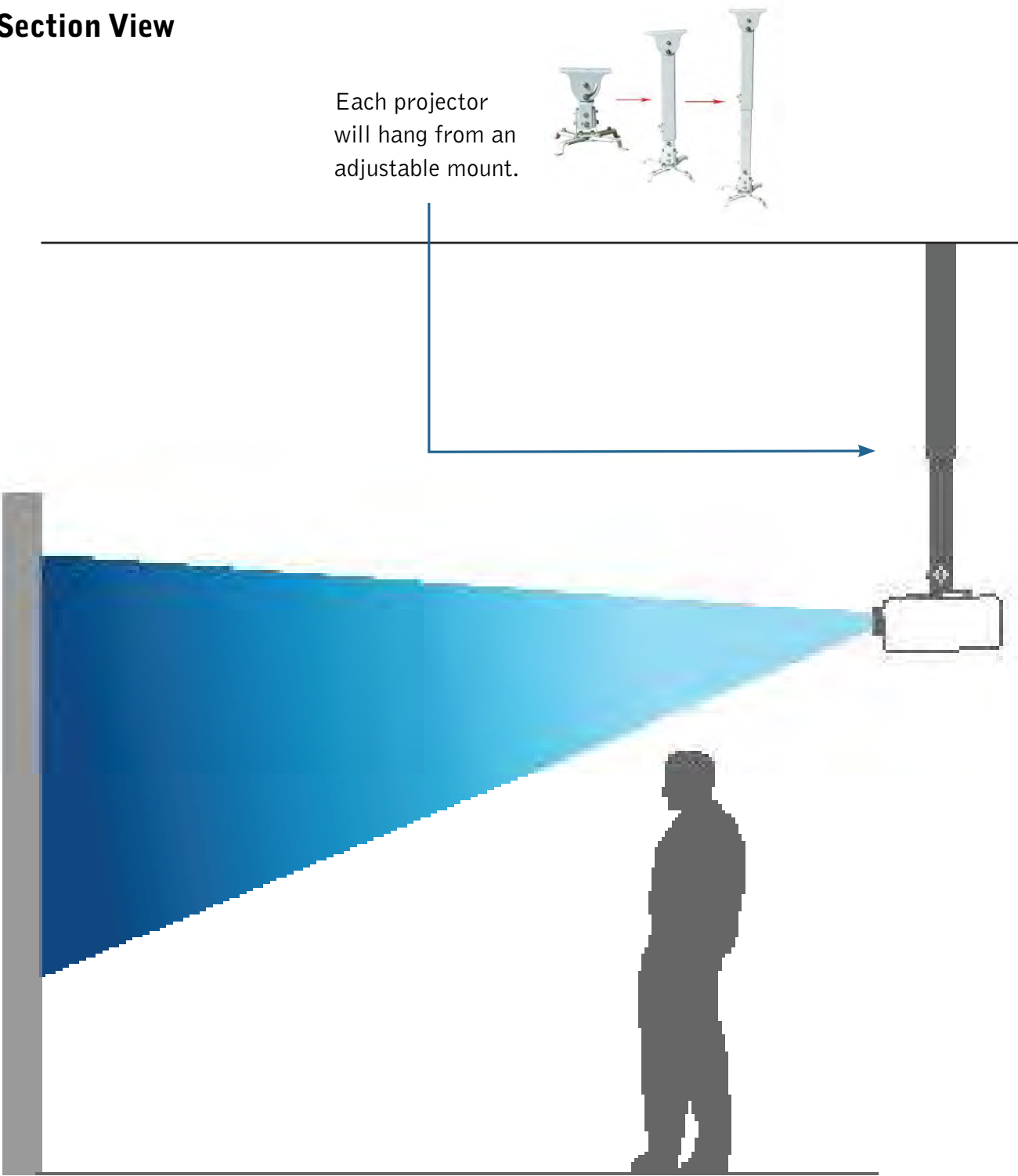


The interior will have LED strips on the bottom of the structure. Because the interior will be dark the LED light strips can indicate the boundary of the structure giving the audience a safety guidelines.

Plan View



Section View



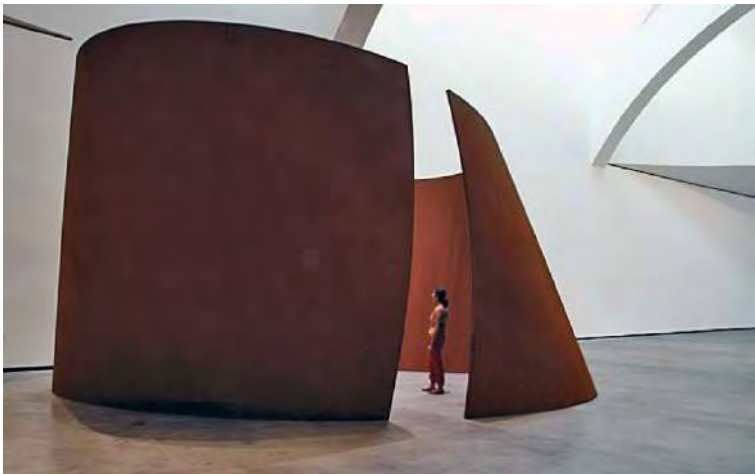
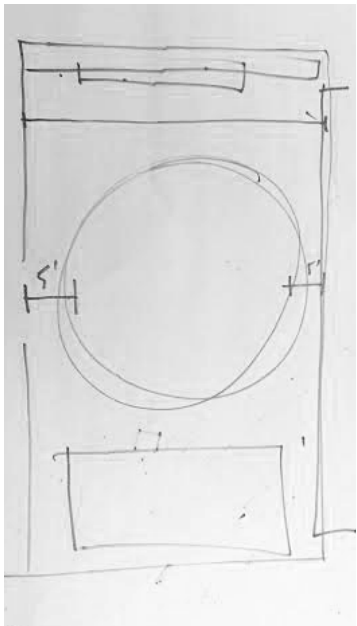
Shape

The new Amelia Earhart exhibition was designed to focus on three important aspects of Earhart’s story: her legacy as a role model, her fame and accomplishments, and her final flight. In order to best tell each, it was planned that the exhibition would feature both emotive, immersive elements and expository, informational elements.

The final design took the form of a freestanding, circular enclosure as a symbolic gesture towards Amelia’s attempted circumnavigation.

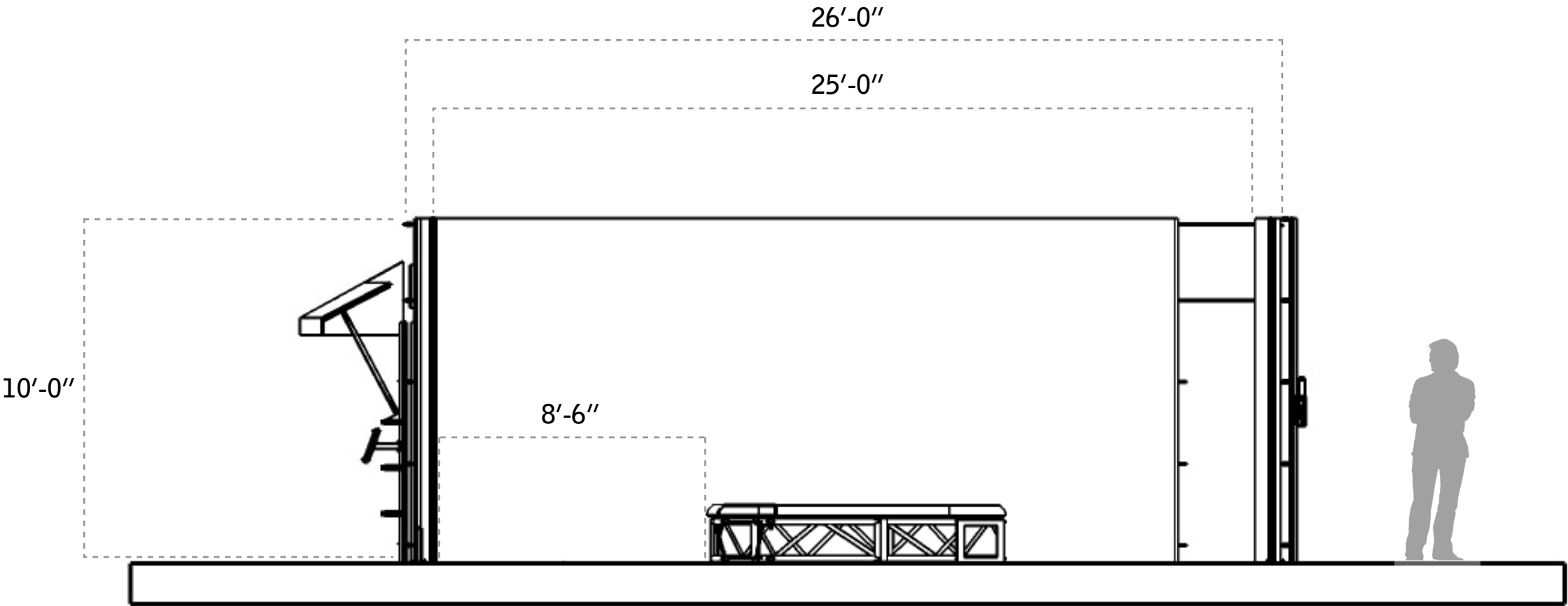
Size

The enclosure interior needed to be able to comfortably contain at least a few families at once. Multiple diameters were tested before a twenty-five foot diameter was agreed upon—almost ten feet greater than the width of the existing exhibition room. For this reason the team chose to design the enclosure without particular regard to its specific placement within the museum.



Section Drawings

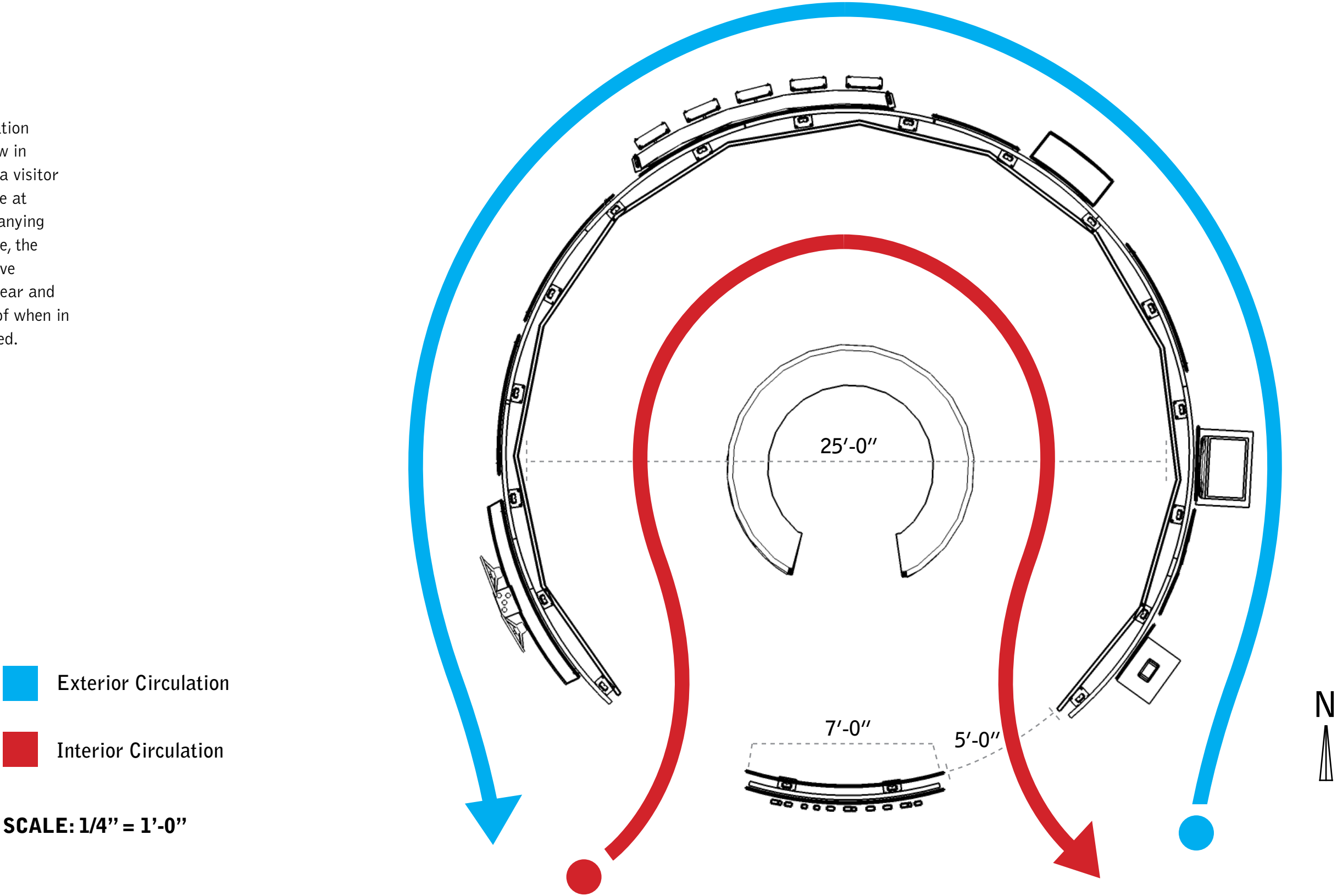
The interior and exterior spaces are separated by a curved wall comprising stretched vinyl, steel framing and curved plywood panels.



SCALE: 1/4" = 1'-0"

Circulation

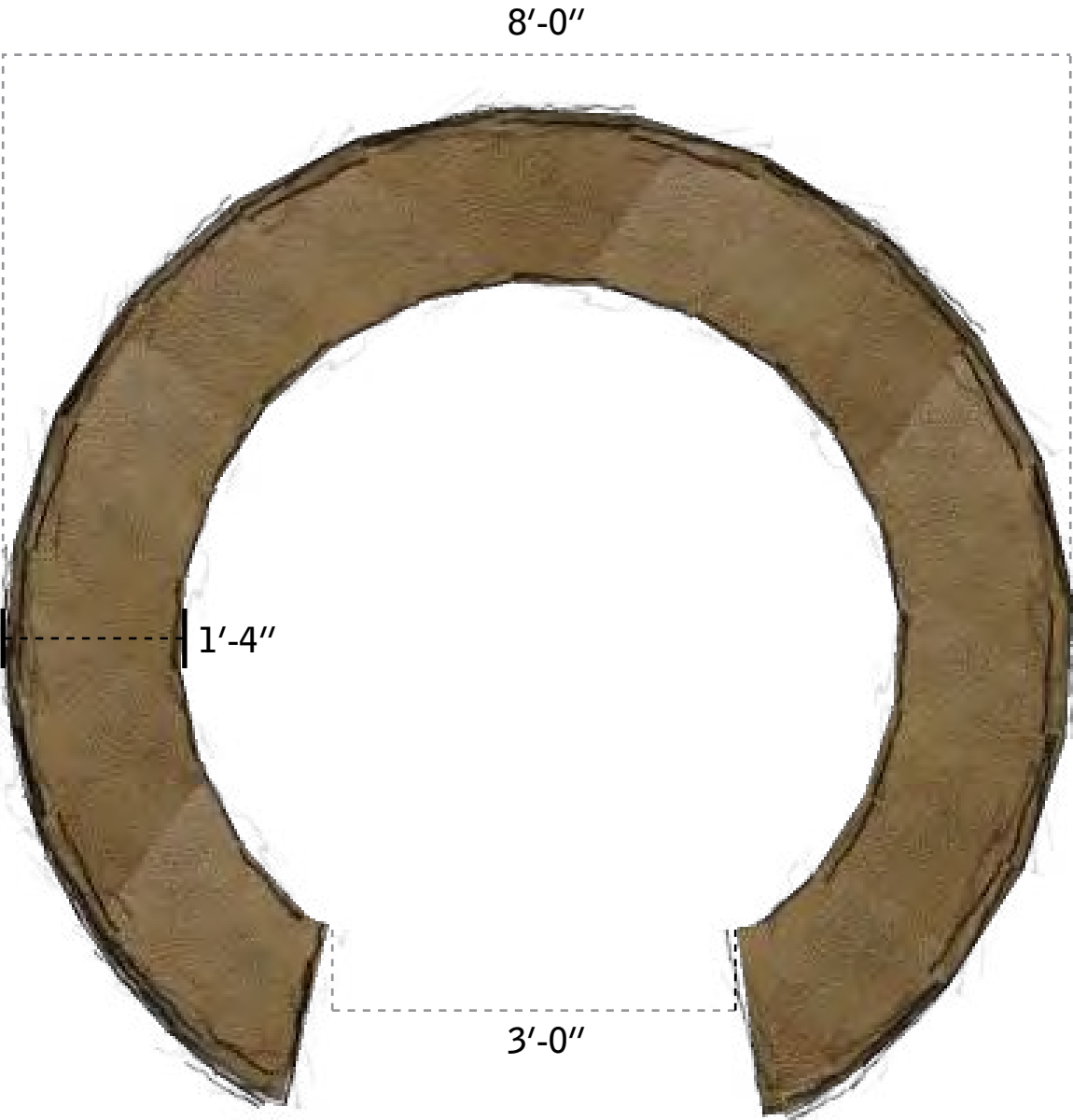
Interior and exterior circulation patterns are designed to flow in opposite directions, so that a visitor will complete one experience at the entrance to the accompanying experience. At the same time, the interior and exterior narrative elements are meant to be clear and understandable regardless of when in the visit they are encountered.



Seating

The seating, like the interior space, is circular and can accomodate 8-10 sitters. An opening allows visitors to sit facing inward or out.

PLAN VIEW



FRONT ELEVATION

Faux-Leather Upholstery

Round Steel Truss



1'-5"



SCALE: 3/4" = 1'-0"

ISOMETRIC - SOUTHEAST



ISOMETRIC - SOUTHWEST



**PERSPECTIVE RENDERING -
TITLE PANEL**

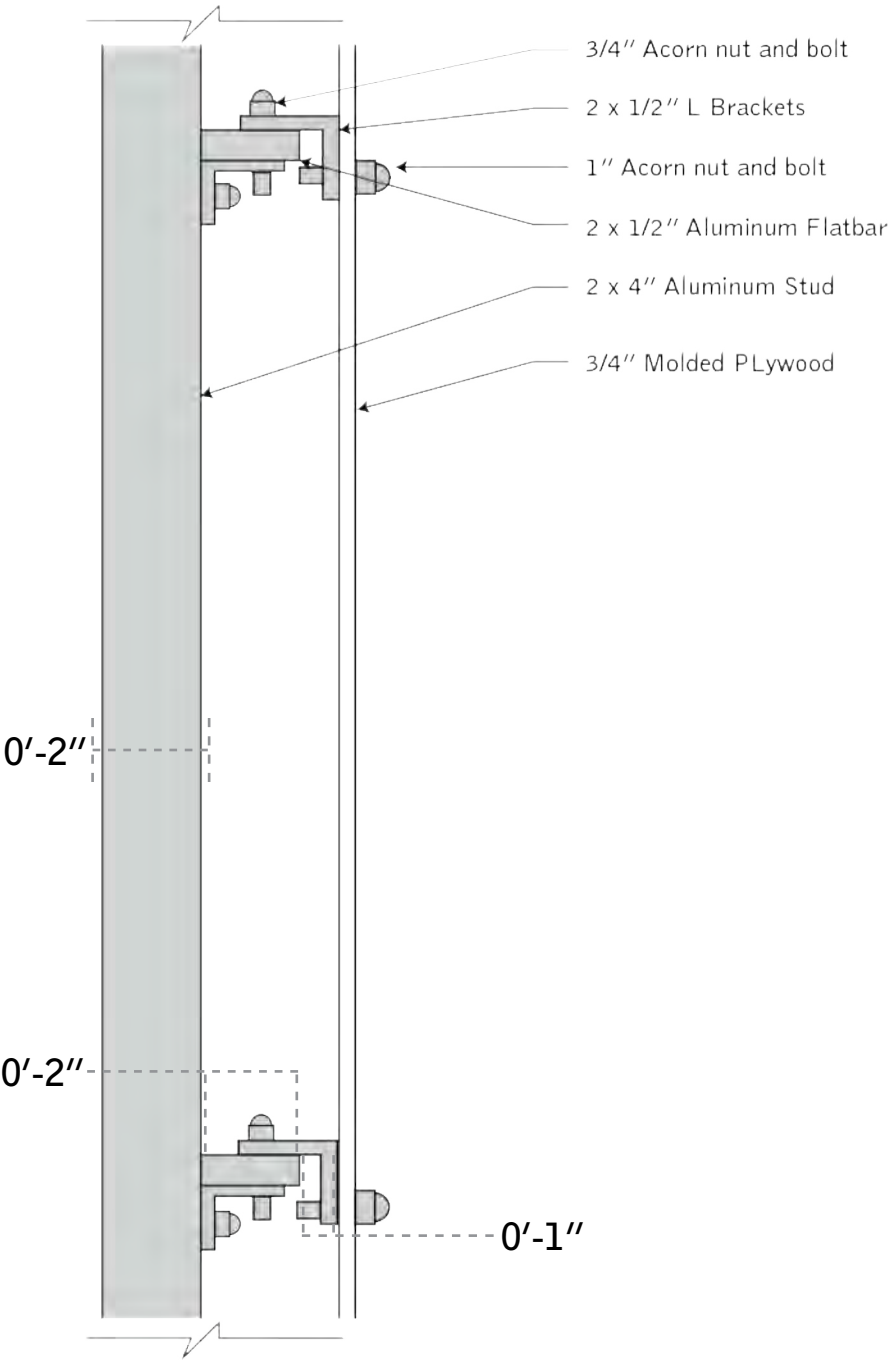


**PERSPECTIVE RENDERING -
WEST WALL**

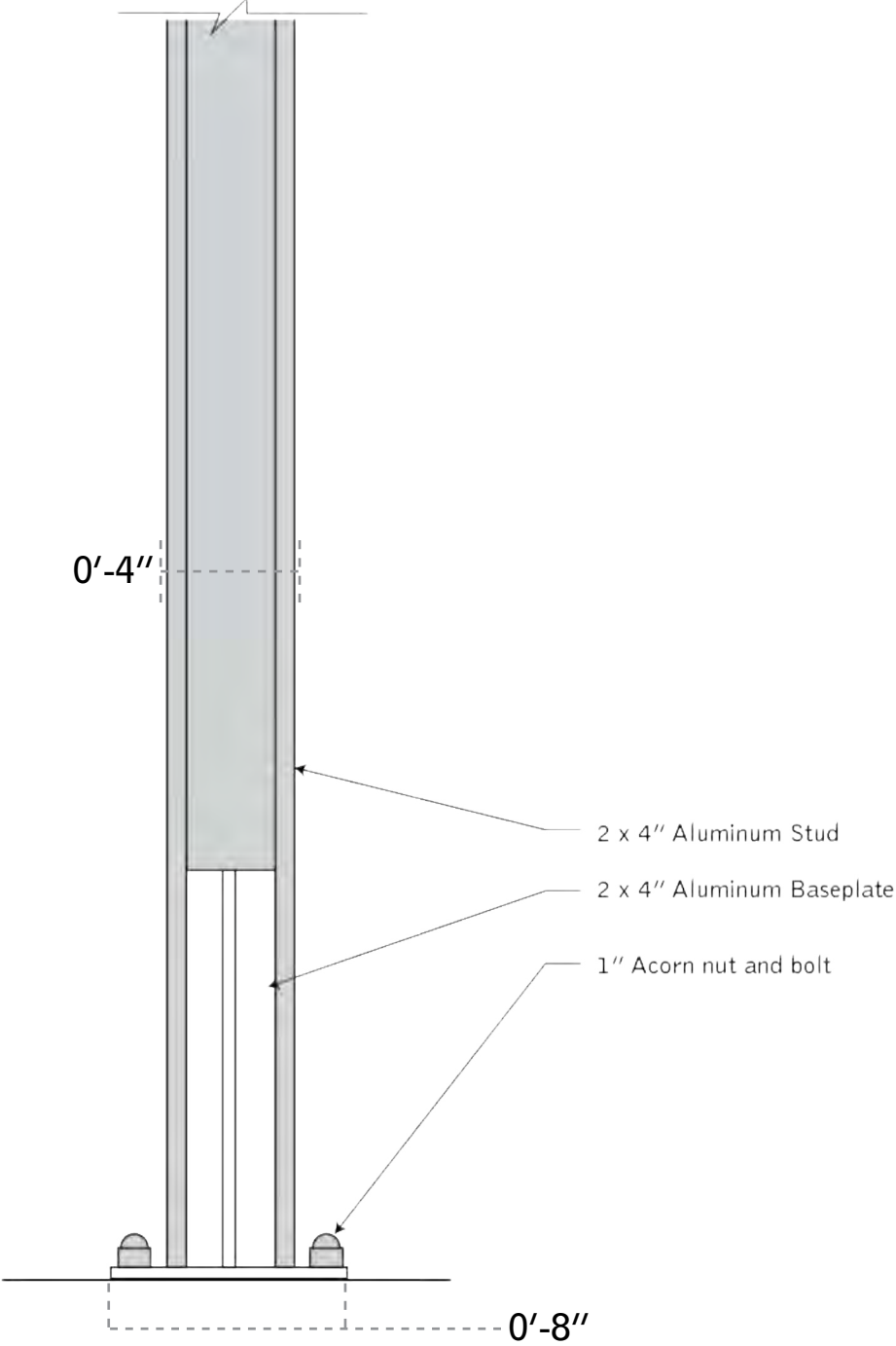


Steel Frame

The steel frame is the main structural and organizational component of the exhibition. Vertical columns of steel studs are held in place by baseplates bolted into the concrete flooring. These verticals hold up horizontal rings of steel flat bar, which enclose the space and allow for the mounting of exterior graphics panels.



Typical structure and panel assembly.



Typical aluminum stud and baseplate.

Interior Elevation



Exterior Elevation



Enter (00:00)

As the visitor enters through the doorway their motion is sensed and the projections and audio begin to play, transforming the space from dark walls and a world map to a experience of Amelia’s last journey full of light.

Taking Flight (00:00-00:40)

The visitor learns about Amelia’s departure from Oakland and the record that she was attempting to break, and feels the excitement of taking flight

Across Oceans (00:40-01:20)

The visitor learns about rough conditions in which Amelia and her navigator Fred flew, and feels the adventurousness of Amelia



Video: flight preparations, take off from Oakland, CA.

Photograph: Crowds sending Amelia off and Amelia and Fred preparing

Sound FX: plane engine turn on, crowds cheering

Lights: Oakland bulb emits a soft blink (like runway lights)

Narration: “On May 20th 1937 Amelia Earhart took off from Oakland, CA...”

Music: Rise by Igor Khabarov (poignant, uplifting)

Video: Atlantic Ocean aerial footage

Photograph: Inside cockpit

Sound FX: Waves, strong wind, airplane flyby

Lights: One by one lights turn on up until Saint-Louis, Senegal

Narration: “By June 7th 1937 Amelia Earhart had crossed the Atlantic Ocean and landed in Saint-Louis, Senegal...”

Music: Rise by Igor Khabarov

Fading Signals (01:20-02:00)

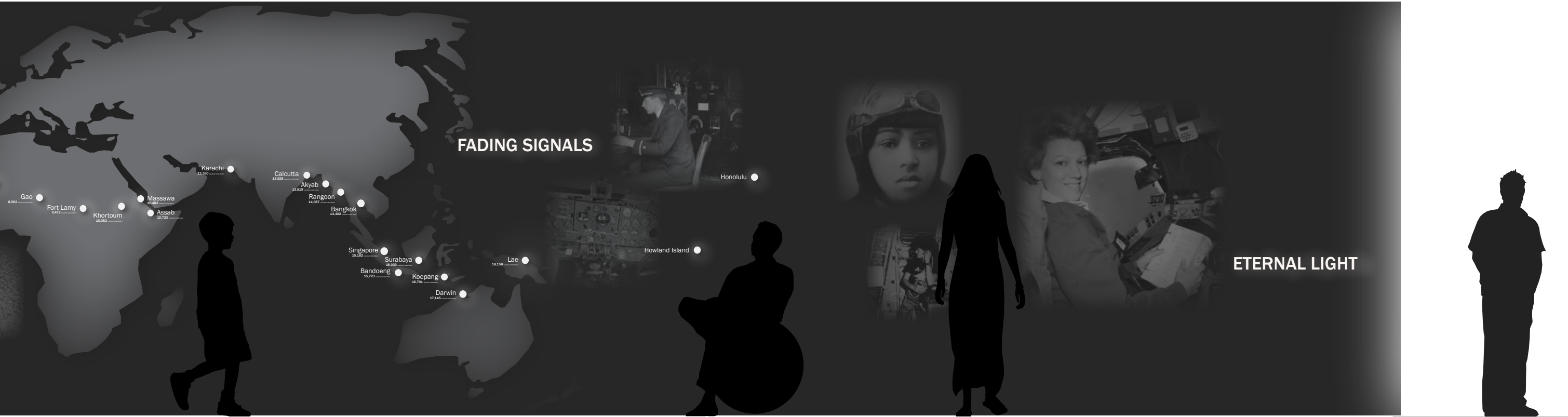
The visitor learns about Amelia and Fred’s navigational troubles and eventual disappearance and feels the loss of the two

Eternal Light (02:00-3:00)

The visitor learns female pioneers in aviation after Amelia and feels inspired and uplifted by her lasting light

Exit (2:30)

As the projection and audio end the visitor can either leave or stay to look at the world map, with Amelia’s stops and her mileage at each lit up by LED bulbs



Video: Searchlight stock footage
Photograph: Gages, radio control
Sound FX: Wind, Radio Transmissions
Lights: One by one all light up, Howland island and Honolulu blink and fade
Narration: “At midnight on July 2nd 1937 Amelia and Fred took off from Lae...”
Music: Rise by Igor Khabarov

Video: Sally Ride and Eileen Collins space lift offs, interviews
Photograph: portraits of female flight pioneers
Sound FX: 4,3,2,1 lift off
Lights: All map lights twinkle like stars in the sky
Narration: “Amelia Earhart’s light and legacy live on in the spirits of female pioneers...”
Music: Rise by Igor Khabarov fades out slowly



Sequence Animation Link

<https://player.vimeo.com/video/129729120> width="500" height="281" frameborder="0" webkitallowfullscreen mozallowfullscreen allowfullscreen></iframe> <p>Interior Animation from Alexis Agoustari on Vimeo.</p>

Sample Projection Video Link

<https://player.vimeo.com/video/129583375> width="500" height="281" frameborder="0" webkitallowfullscreen mozallowfullscreen allowfullscreen></iframe> <p>Amelia Takes Flight from Alexis Agoustari on Vimeo.</p>

Amelia Earhart

Perspectives

Museum-Owned Object List

Oakland Aviation Museum

06.04.15

© Studio 187

Photographs (6)

- 1) Black&white photograph of Amelia Earhart with her plane. Earhart is in formal stance. Signed by Earhart. Yellowed with age. 6.5x9.25 in.
- 2) Black & white photograph of Amelia Earhart striding in front of her Lockheed Vega. 8.25x10.25 in
- 3) Black and white photographic print of Amelia Earhart standing in front of her Electra. The photograph is circa 1937.
- 4) Photo of Amelia Earhart on Luieline.
- 5) Framed Portrait of Amelia Earhart Putnam Aviation Hall of Fame Collector Series of Portraits by Milton Caniff Copyright: Aviation Hall of Fame, Inc., 1978
- 6) Framed print of Amelia Earhart circa 1936. photog-rapher unknown.



Newspaper Clippings (4)

- 1) From a newspaper in Hawaii (na.e of newspaper and date are not included in the clipping), an article “Earhart memorial to return”, by Charles H. Meyer.
- 2) From the Oakland Tribune, Sunday, March 16, 1997, top half of p. C-3. Article entitled “North Field: Amelia could find landmarks today” by Annalee Allen (“Landmarks” column).
- 3) Montclarion (local Oakland-area newspaper), Friday, March 14, 1997, pp. 11, 12, 15 and 16. Two articles on p. 11 - “Preparing to Soar” about Linda Finch’s upcoming flight recreating Amelia Earhart’s ill-fated 1937 round-the-world flight.
- 4) Oakland Tribune, Oakland, CA, Sunday, July 3, 1960, pp. 1-2. Pg. 1 - Article on Amelia Earhart entitled “Was Amelia Earhart On U.S. Spy Mission?” by Jack Ryan



Pin

Commemorative Pin - “Amelia Earhart” “Around the World Flight May 20, 1937” Lions Club logo and “District 4-C3”. 1-5/8 x 2 in., cloissone enamel image: portrait of Amelia Earhart, picture of her Electra aircraft and map showing the route of her flight. In excellent condition.



Cloth Fragment

A piece of upholstery from Amelia Earhart’s Lockheed Vega, with her own typed description, following her first trans-Atlantic solo flight. Deep red/maroon color, some color is rubbed off. Cloth piece is 1-5/8 x 1-7/8 in. in size. Mounted in a frame together with GA2012.86 and GA2012.88. Accompanied by a letter of authentication from Sally Putnam Chapman, granddaughter of G.P. Putman, Earhart’s husband.

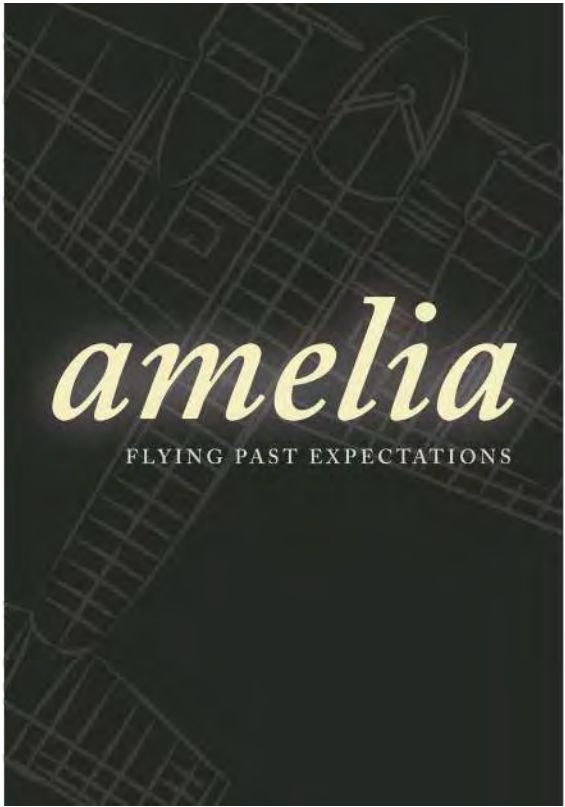


Flight Jacket

A womens suede/leather jacket owned by Maria Hayle, a pilot lesson student at the Oakland Airport during the time of Amelia Earhart.



NB:
These are not accurate representations of the artifacts. The pictures are used to gain a general understand.



1) Born for Adventure

This first section is the introduction and story of how Amelia Earhart defied expectations from society. It provides the visitors with a quick introduction about Amelia and the person that she was - and how her strong personality ultimately helped her become a hero.

2) Suiting Up

In this section, visitors are able to learn more about Amelia and her passion for fashion design and aviation. The replica of her flight jacket and flight suit help the audience understand how important clothing was in aviation.



3) Extra! Extra!

Extra, extra, read all about it! Visitors are able to flip through pages of newspapers and magazines here, creating a tactile and interactive experience. They will be able to see and read about Amelia’s rise to fame.

4) Faster & Higher

This infographic shows Amelia’s many flight paths, as well as the records that she set. The pin commemorates one of the records, and allows visitors to see a physical award that she won for her accomplishment.

5) Flying with Amelia

This cockpit replication is a fun, interactive way for visitors to “fly with Amelia”. Visitors get a chance to experience how it would feel like to fly Amelia’s plane with her, including turning the wheel and pulling levers.



“Defying Expectations” Story

Amelia grew up in the Midwest. Was a child who did not want to conform to expectations for females. Her mother, Amy Earhart, was an adventurer, was first woman to climb Pike Peaks in Colorado. She later encouraged her flying, helping her buy her first plane, the Canary.

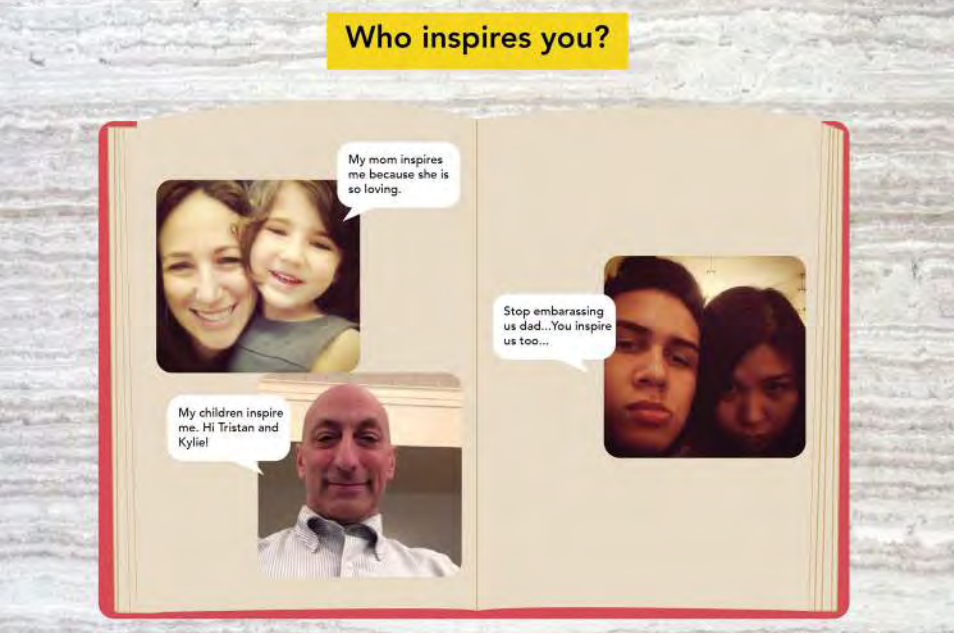
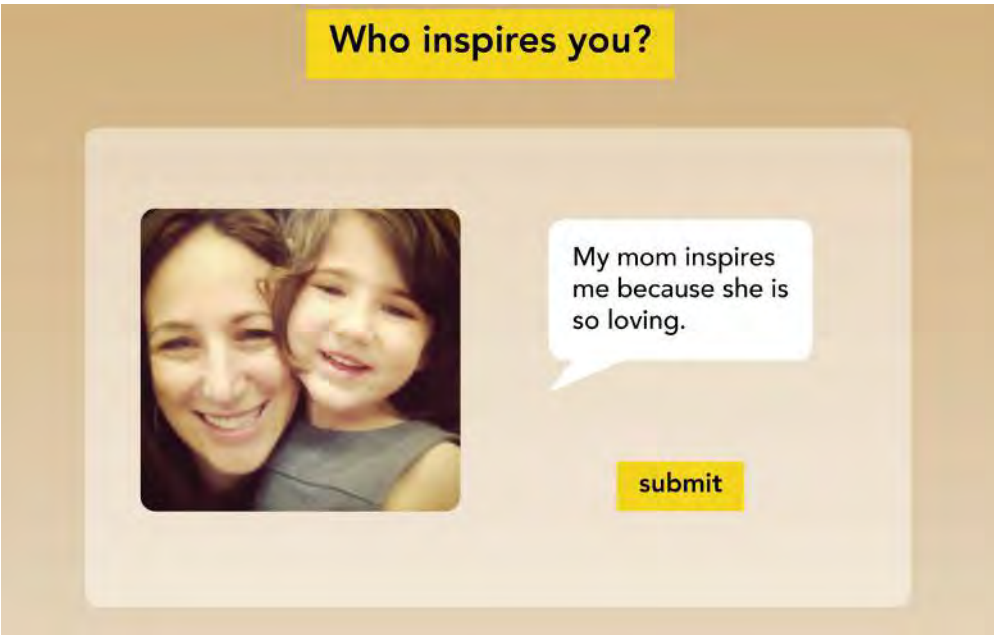
“Entrepreneur” Story

Amelia was charismatic and took advantage of opportunities like endorsing advertisements and designing her own line of suitcases.

Objects

These items are going in this section as a way to showcase the accomplishments she made as a child. The items in the suitcase, the scrapbook, and the images all help tell the story of Amelia Earhart. They are displayed as a way to show the audience what was important to her.





Screens

Amelia’s Digital Scrapbook of Inspirational Women -As she was growing up, Amelia kept a scrapbook containing pictures of women who inspired her. Some of these women included other female pioneers in aviation, such as Neta Snook who ended up being one of Amelia’s flight instructors.

Inspiration Screen

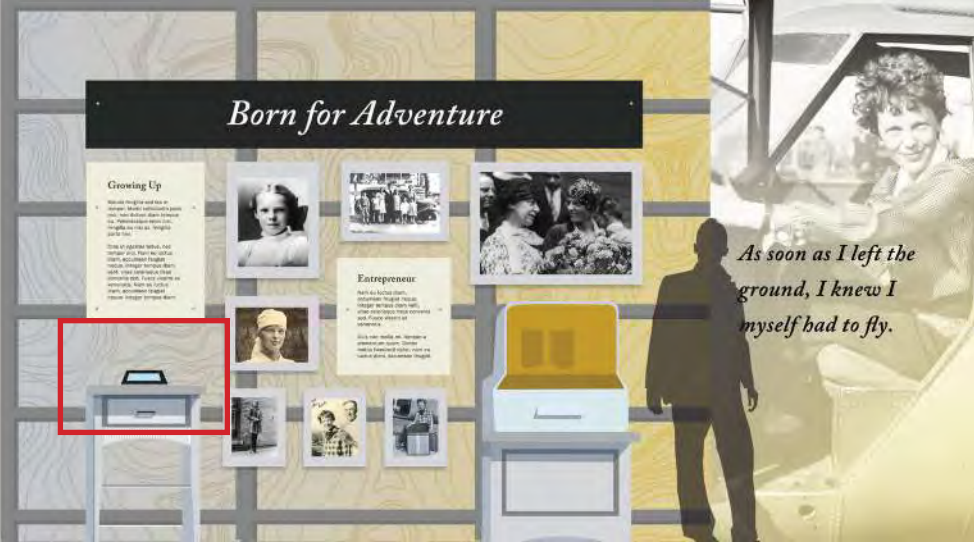
This is the inspiration screen where visitors are able to flip through the pages of the digital notebook as a way to view their own entry, as well as previous ones.

Who inspires you?

This is the main screen where users can take a photo of themselves. They are encouraged to participate in this as a way to be a part of the exhibit, as well as to think about who inspires them, just as Amelia did.

Tell us, who inspires you?

Take a picture of yourself with your friends or family and tell us who inspires you today! This creates a more immersive experience and allows the visitors to feel like they a part of the exhibit.





Story

This is similar to what Amelia would wear when she flew. Conditions for flying were harsh back when biplanes were in use. Here’s how it helped protect her.

Amelia Earhart brought her own special style - even to her outerwear when she was flying. Her first flight instructor, Neta Snook - who happened to be one of her inspirations as well, recalled her showing up for lessons in a beautifully tailored riding outfit. Amelia would eventually help design and publicize a line of clothes marketed for “the woman who lives actively”.

On these flights, she wore a leather wool-lined flight suit like this one. This flight suit was one of the first suits specifically designed for women. The cut and style details on the front panel help show it was designed for a woman’s body. Another feature that differs from men’s flight suits is how the suit opens up to let the pilot relieve herself on long distance flights. Men’s suits usually opened in the front. Earhart is photographed wearing both styles.

She flew to 14,000 feet and shattered the women’s altitude record. Flights like this took her high into the atmosphere where the air was cold. With heavy seams, zippers, and wool lining, a suit like this was designed to protect pilots from the elements. This suit would have been the outer layer and a pilot would wear multiple layers underneath. Amelia needed a flight suit this protective and warm to be the record breaker she was.

Objects

- Flight jacket
- Flight suit (printed graphic)





Purpose

This news stand is an interactive way for visitors to learn about Amelia’s rise in fame, as well as her many flights. Visitors are able to read excerpts from newspapers and magazines regarding her aviation accomplishments.

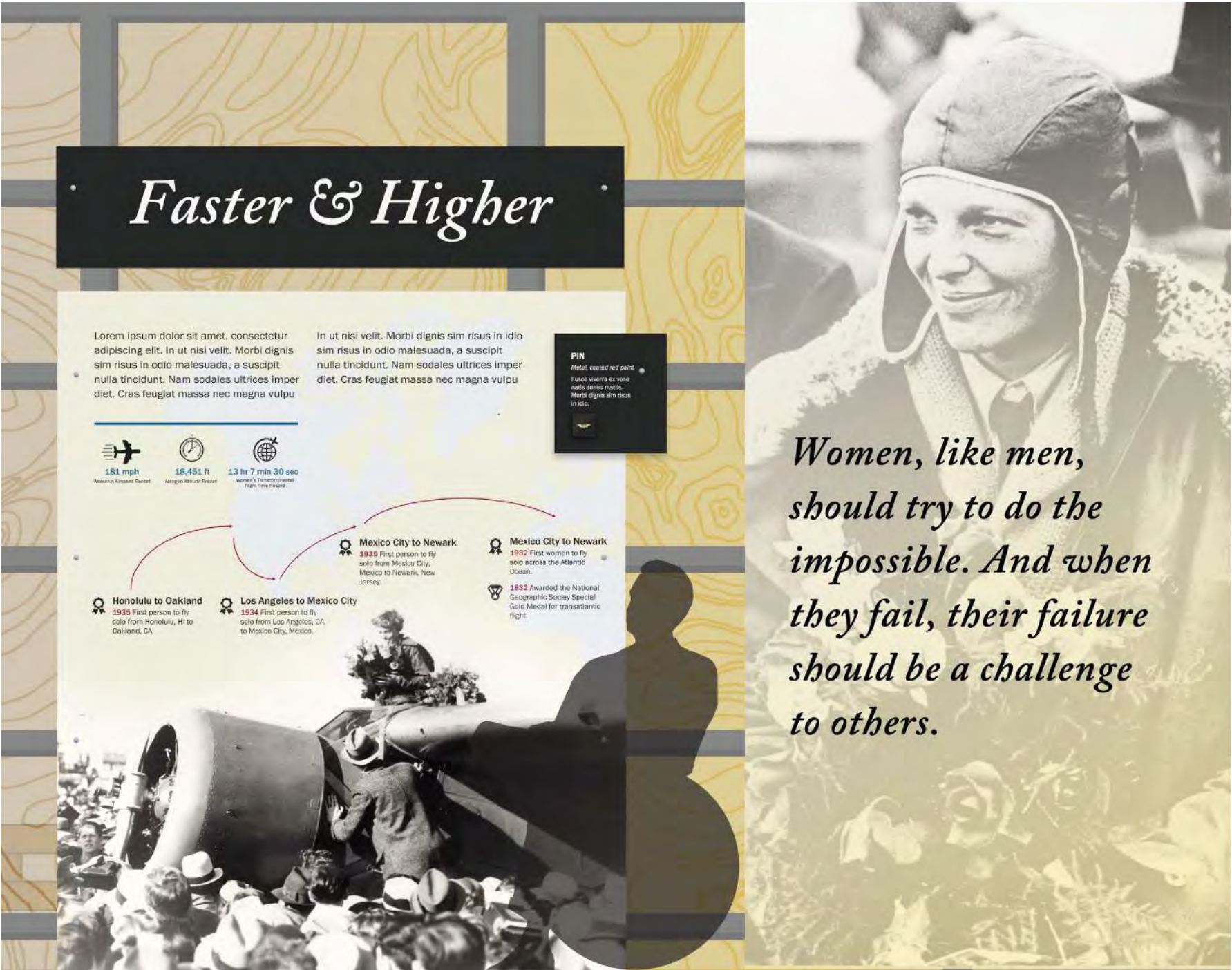
Mechanics

Newspaper pieces are sandwiched between acrylic sheets; the bottom layer of acrylic is attached to a retractable pulley system – much like an display iPad at the Apple store. This allows the reader to draw the article closer to themselves.

Objects

Scanned versions of the archived articles.

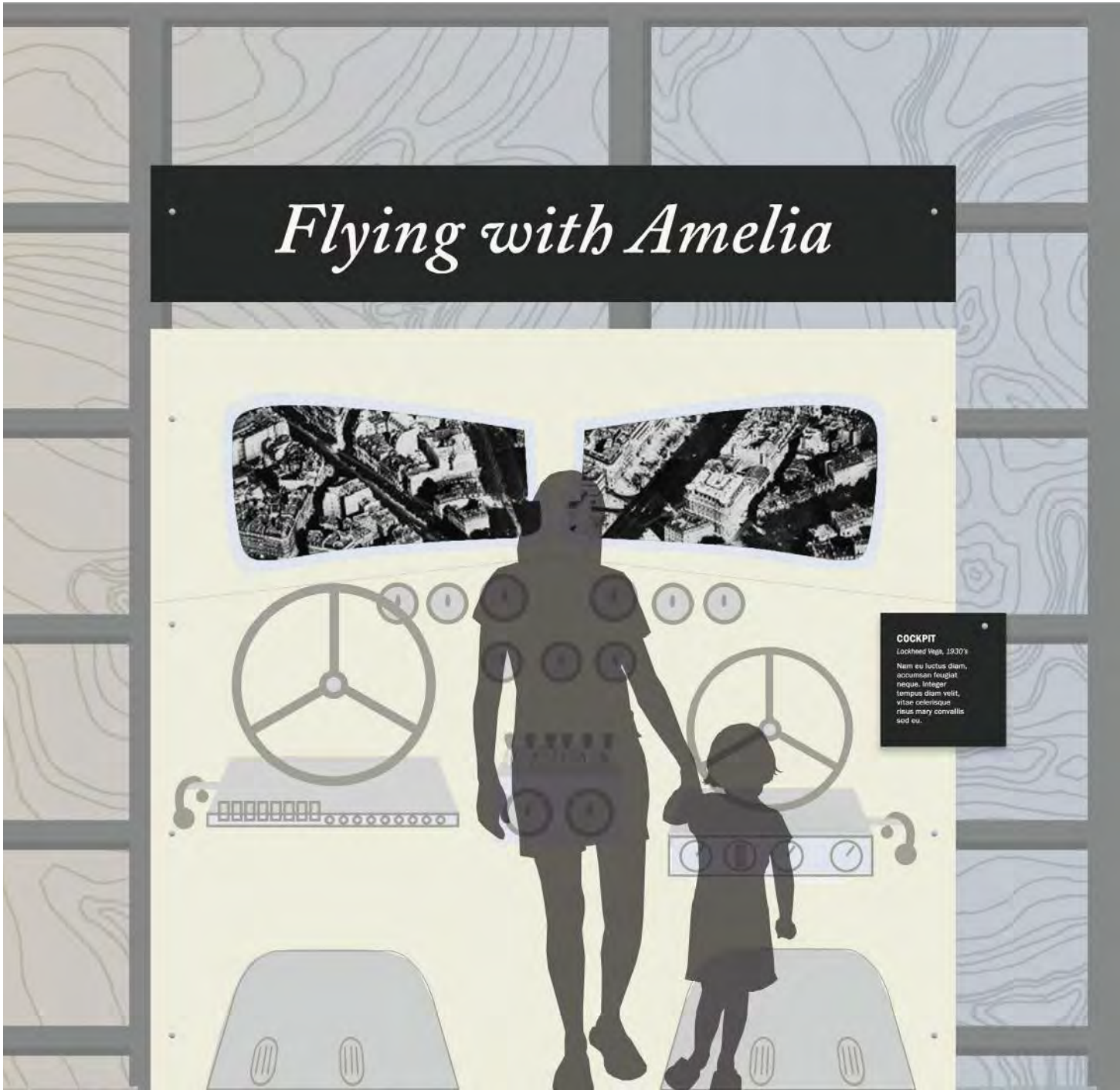




Story
Amelia was a pioneer not just for women, but for aviation as a whole. The infographic displays a collection of her achievements including records she set, awards she received, and voyages she pioneered.

Callouts
This area highlights records she set and awards she received and gives a title and brief summary of Amelia’s achievements. The map displays the various routes that Amelia pioneered, the takeoff and landing locations, and the year she completed the flights.





Story

After experiencing Amelia’s life through the various exhibits on the exterior, the interactive flight puts visitors in her shoes at the wheel of her final plane, the Lockheed Electra. This allows people to imagine how Amelia felt in the cockpit of her plane – a very simple and mechanical vehicle, compared to today’s highly digitized ones – and what it took to be a pilot in her time.

Two people may be seated side-by-side in the cockpit. Pulling a lever will prompt the interactive experience to begin. People seated may wear headphones, through which recordings of Amelia’s voice and the plane engine will play. Simultaneously, a picture will be shown in the windows; pulling on another lever triggers a slide change of the image in the windows – much like a large-scale stereoscope.

The recording of “Amelia” will relay stories of her trips to the places depicted in the slides. For example, the one of Ireland can talk about her crash landing in a field. There would be also a slide of South Wales in the background as she talked about her experience as a the first female passenger across the Atlantic and how this inspired her to fly on her own.

Objects

Replica of the Lockheed 10E Electra flight deck, created by the museum’s airplane replica-maker; headphones.

Technology

Two Screens, angled to fit the windows. Slides will not play or switch until someone pulls the lever or turns the wheel.

Screens

One large screen to simulate the window.



Segment 1 (Title)

3D Letters	\$70
Total	\$70

Segment 2 (Map)

Printing	\$600
Additional Vinyl	\$10 sq/ft
Total	\$600

Segment 3 (Suit & Jacket)

Jacket	Loan
Printed Vinyl Suit	\$180
Printed Placards (5)	\$34.00
Frame for Jacket	\$500.00
Total	\$714.00

Segment 4 (Suitcase & Table)

Table #1	\$300
Table #2	\$360
Suitcase	Loan
Placards (2)	\$13.60
Tablet	\$599.99
Picture Frames	\$105
Total	\$1,378.59

Segment 5 (News Stand)

Acrylic Pieces	\$113.00
Track Lights (1)	\$38.90
Led Light Bulbs(3)	\$15
Awning Set Up	\$150
Plywood	\$80.00
Paint	\$40 Gallon
Vinyl Transfers	200.00
Canvas/Fabric	\$20
Total	\$656.90

Segment 6 (Interior Map)

Heavy Duty Vinyl	\$6,000.00
Grommets	\$7.00
Projectors (3)	\$897.00
Track Lighting (5)	\$155.60
LED Lightbulbs (15)	\$75.00
Strip Lighting	\$79.00
Title Board	Vinyl \$600
Speakers	\$800
Fasteners	\$25
Individual LEDs	\$172.55
LED power source	\$12.60
Total	\$8,823.75

Segment 7 (Cabin Replica)

40'' Screens (2)	\$600.00
Dials	\$14,000
Headphones	\$498
Stools	\$200
Steering Wheel	\$70
Levers	\$65
Plywood	\$40.00
Total	\$15,408.00

Segment 8 (Amelia Quotes)

Printed Vinyl	\$600.00
Total	\$600.00

Segment 9 (Structure)

Aluminum Flat Bar	\$195.12
Metal Studs	\$38.64
Braces	\$4.00
Plywood	\$800.00
Printed Background	\$6,000.00
Fasteners	\$50
L Brackets	\$480
Acorn & Nut Bolt	\$160
Vegan Leather	\$90
Foam	\$160
Trusses	\$600
Total	\$8,577.00
Addition Materials	\$300.00
10% Contingency Fee	\$3,712.82

TOTAL \$40,841.06

Segment 1 (Title)

3D Letters	\$50
Total	\$50

Segment 2 (Map)

Printing	\$600
Additional Vinyl	\$10 sq/ft
Total	\$600

Segment 3 (Suit & Jacket)

Jacket	Loan
Printed Vinyl Suit	\$180
Printed Placards (5)	\$34.00
Frame for Jacket	\$500
Total	\$714.00

Segment 4 (Suitcase & Table)

Table #1 (Build)	\$100
Table #2 (Build)	\$150
Suitcase	Loan
Placards (2)	\$13.60
Tablet	\$99.99
Picture Frames (Build)	\$75
Total	\$438.59

Segment 5 (News Stand)

Acrylic Pieces	\$113.00
Track Lights (1)	\$38.90
Led Light Bulbs(3)	\$15
Awning Set Up	\$150
Plywood	\$80.00
Paint	\$40 Gallon
Vinyl Transfers	\$200.00
Canvas/Fabric	\$20
Total	\$656.90

Segment 6 (Interior Map)

Heavy Duty Vinyl	\$900.00
Grommets	\$7.00
Projectors (3)	\$474.00
Track Lighting (5)	\$155.60
LED Lightbulbs (15)	\$75.00
Strip Lighting	\$10
Title Board (Paint)	\$75
Speakers	\$160
Fasteners	\$25
Individual LEDs	\$57.71
LED power source	\$12.60
Total	\$1,951.91

Segment 7 (Cabin Replica)

40'' Screens (2)	\$600
Dials	\$325
Headphones	\$498
Stools	\$98
Steering Wheel	\$70
Levers	\$35
Plywood	\$40.00
Total	\$1,631

Segment 8 (Amelia Quotes)

Printed Vinyl	\$600
Total	\$600

Segment 9 (Structure)

Aluminum Flat Bar	\$130.08
Metal Studs	\$38.64
Braces	\$4.00
Plywood	\$800.00
Printed Background	\$900.00
Fasteners	\$50
L Brackets	\$480
Acorn & Nut Bolt	\$160
Vegan Leather	\$60
Foam	\$80
Trusses	\$600
Total	\$3,248.72
Addition Materials	\$300.00
10% Contingency Fee	\$1,019.11

TOTAL	\$11,210.23
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Pictured from left to right. First row: Kevin Tsukamoto, Sophia Lisaius, Serena Marini, Mary Doyle, Alexis Agoustari
Second row: Tom Chen, Zackery Jones, Elsa Lu, Tina Chen, Annie Li, Janice Pang, Timothy McNeil
Not pictured: Jessica Park

If I could add anything to an airplane it would be...

Timothy McNeil (Director)- "... treadmills, hammocks, and a Jacuzzi."

Mary Doyle- "... a collection of live, baby cheetahs, and other sorts of the feline family."

Serena Marini- "Yes, definitely cats. Perhaps giant cats you could sleep on, might as well throw a couple chameleons in there...not that you'd be able to see them..."

Zackery Jones- "... a bike lane."

Kevin Tsukamoto- "... a soccer field."

Sophia Lisaius- "... rotating chairs so you can talk to your friends. And maybe a little cafeteria and a bar. "

Tina Chen- "... an ice rink."

Tom Chen- "...a puppy. Just one."

Elsa Lu- "... a breakfast buffet featuring waffles, bacon, and eggs."

Janice Pang- "...a legitimate water bottle holder."

Annie Li- "... a whole entire room made out of blankets and pillows and stuffed animals so everyone can hang out."

Jessica Park- "...transparent walls."

Alexis Agoustari- "Well I am afraid of flying, so I would actually take off the wings so we couldn't go anywhere."