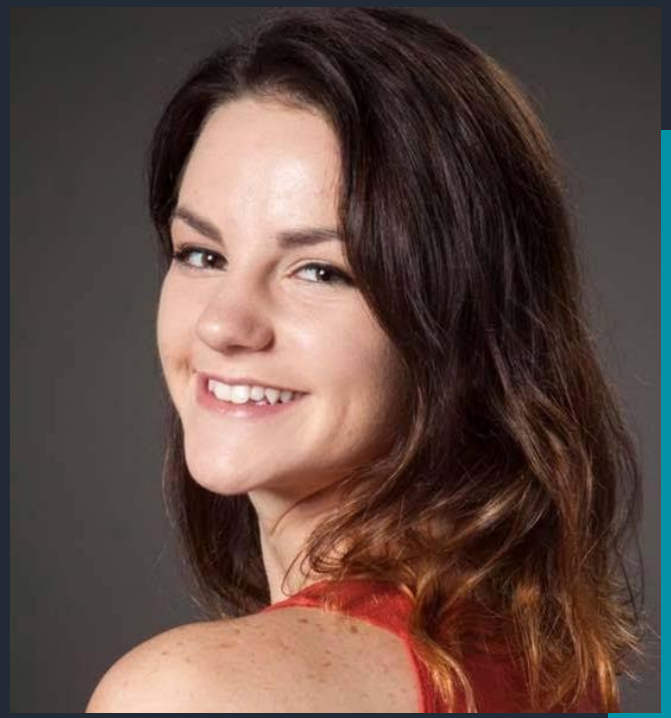





PRESENTING THE LEGACY OF THE SATURN V INSTRUMENT UNIT AT TECHWORKS!

Victoria Osuchowski & Nika Stanisz

Our Team



2020 MBA Candidate:
Concentration in Management Information Systems

Bachelors in
Political Science & Economics

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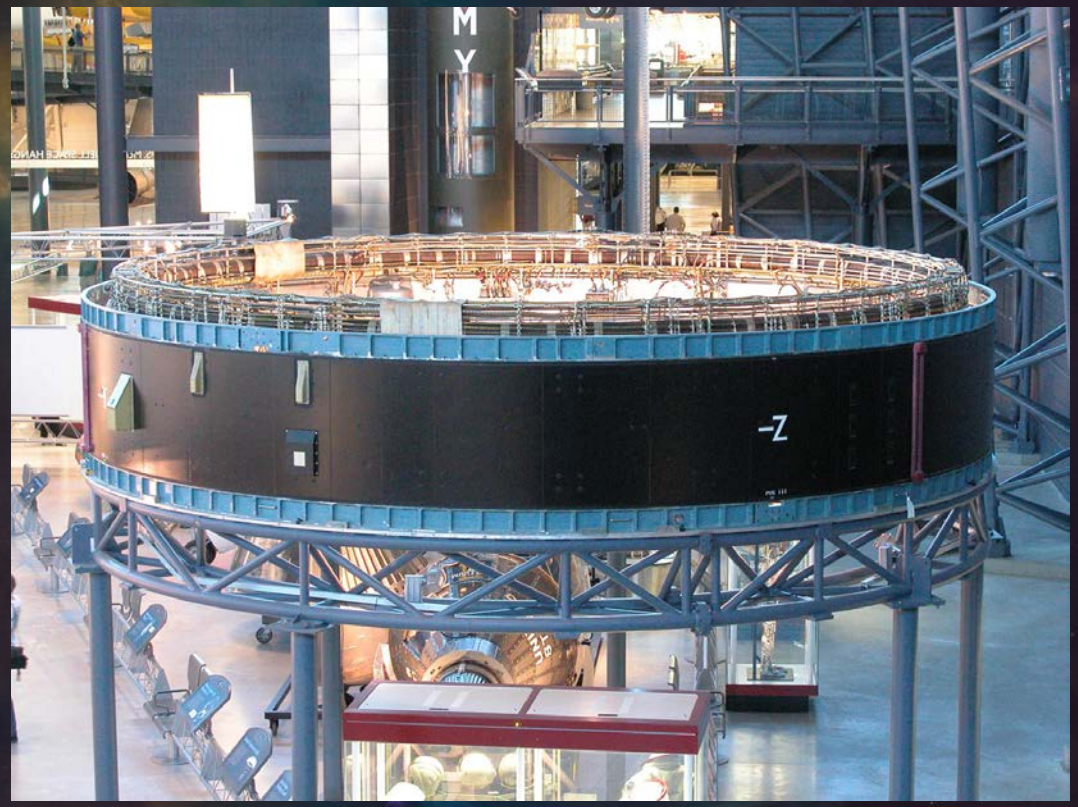
What is Techworks!?

MISSION: to document and present in context the inventions and industrial innovations of New York's Southern Tier.

Our Project Goal

Creating a plan that would determine the feasibility of various 3D projection options for the future the *Out of this World Technology* gallery, and compile them to present to potential designers, vendors and investors.

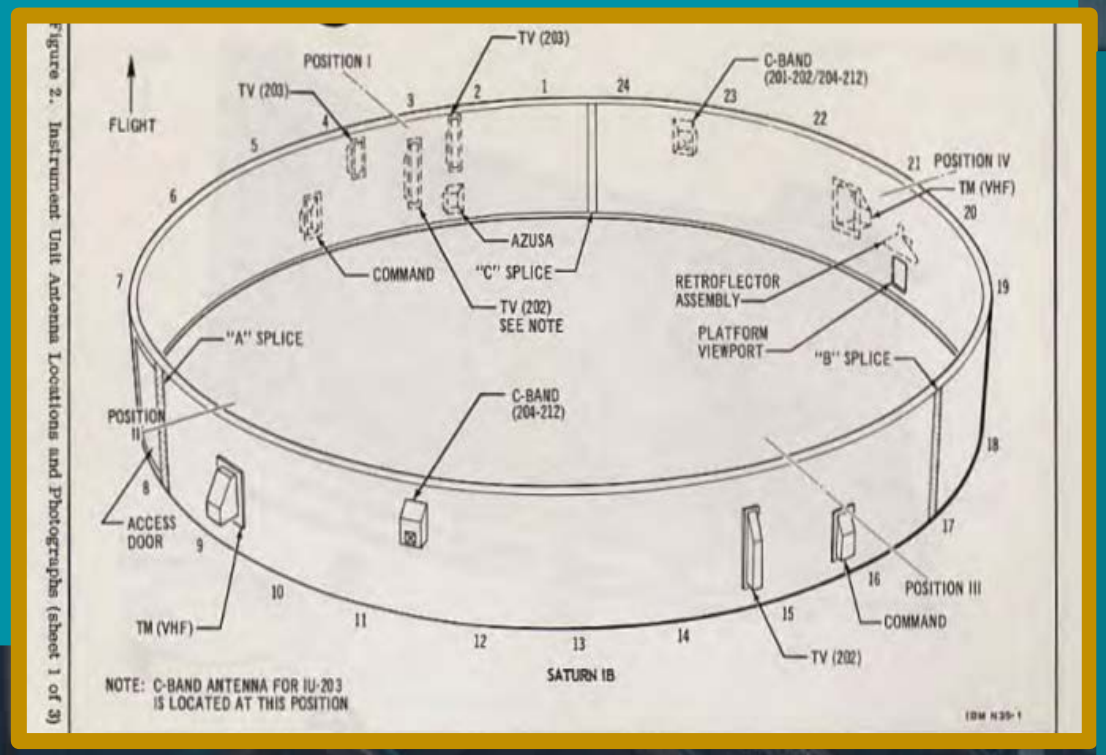


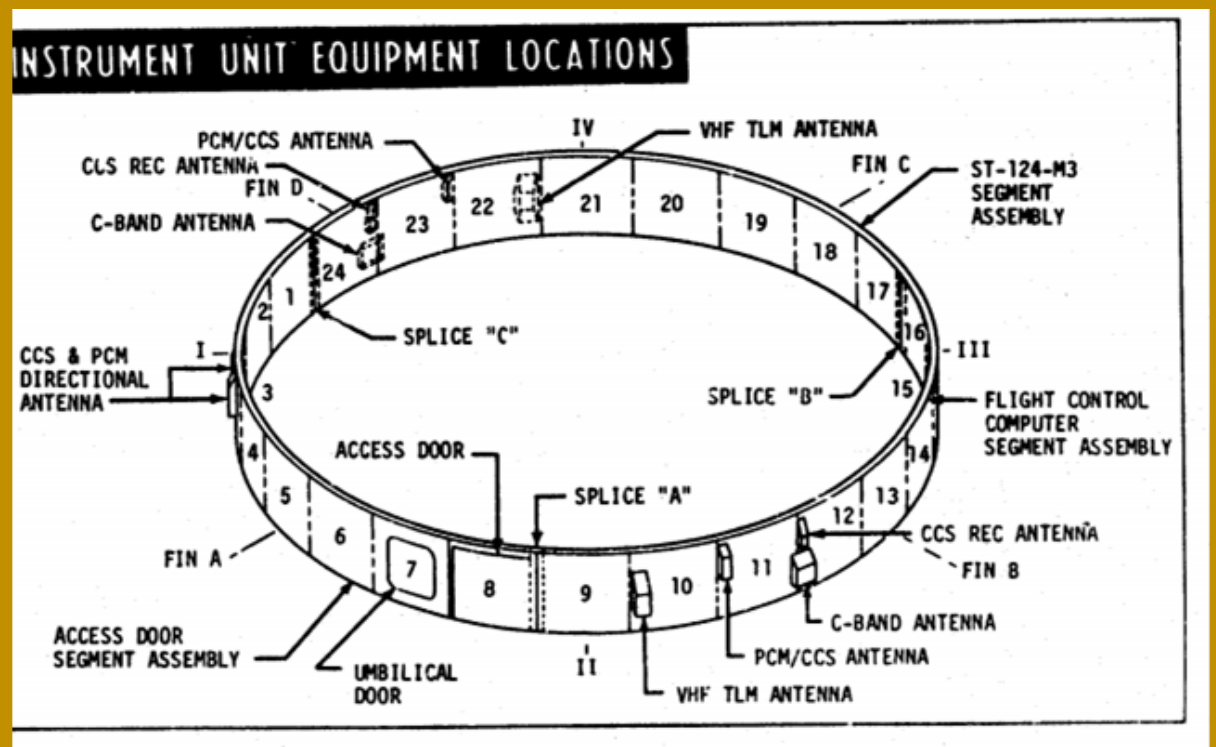
TechWorks! 3D Projection Project

WHY THE SATURN V INSTRUMENT UNIT?

- ★ Designed, built, and programmed at IBM Owego
- ★ The "Brain" - Controlled the trajectory of the rockets carrying Apollo Astronauts to the moon

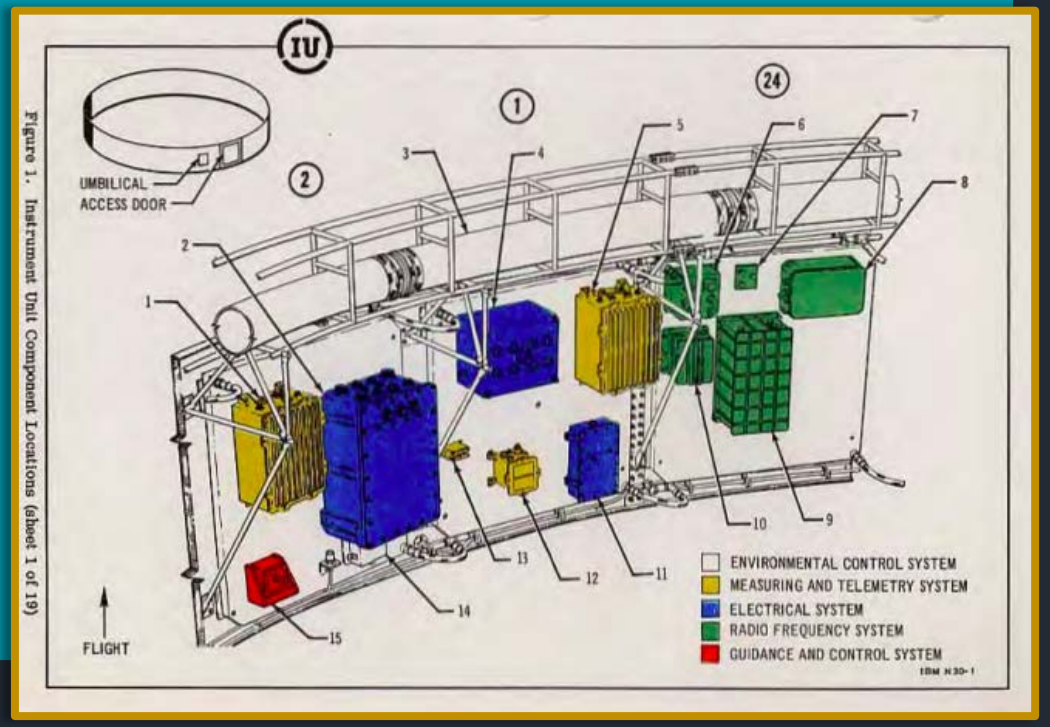
Showcasing the Instrument in a Projection

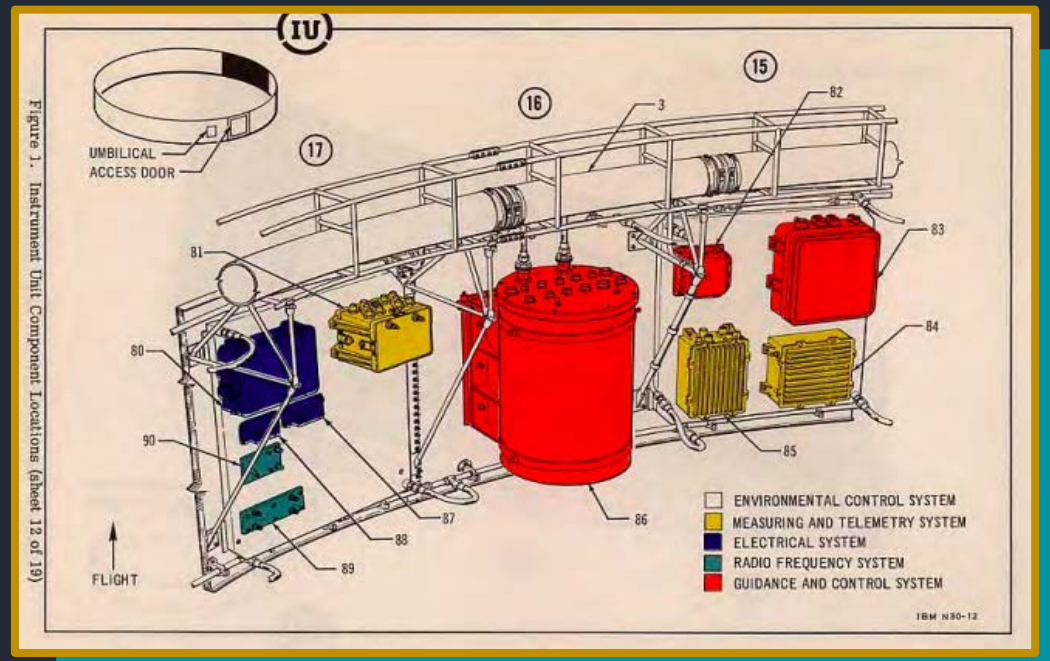




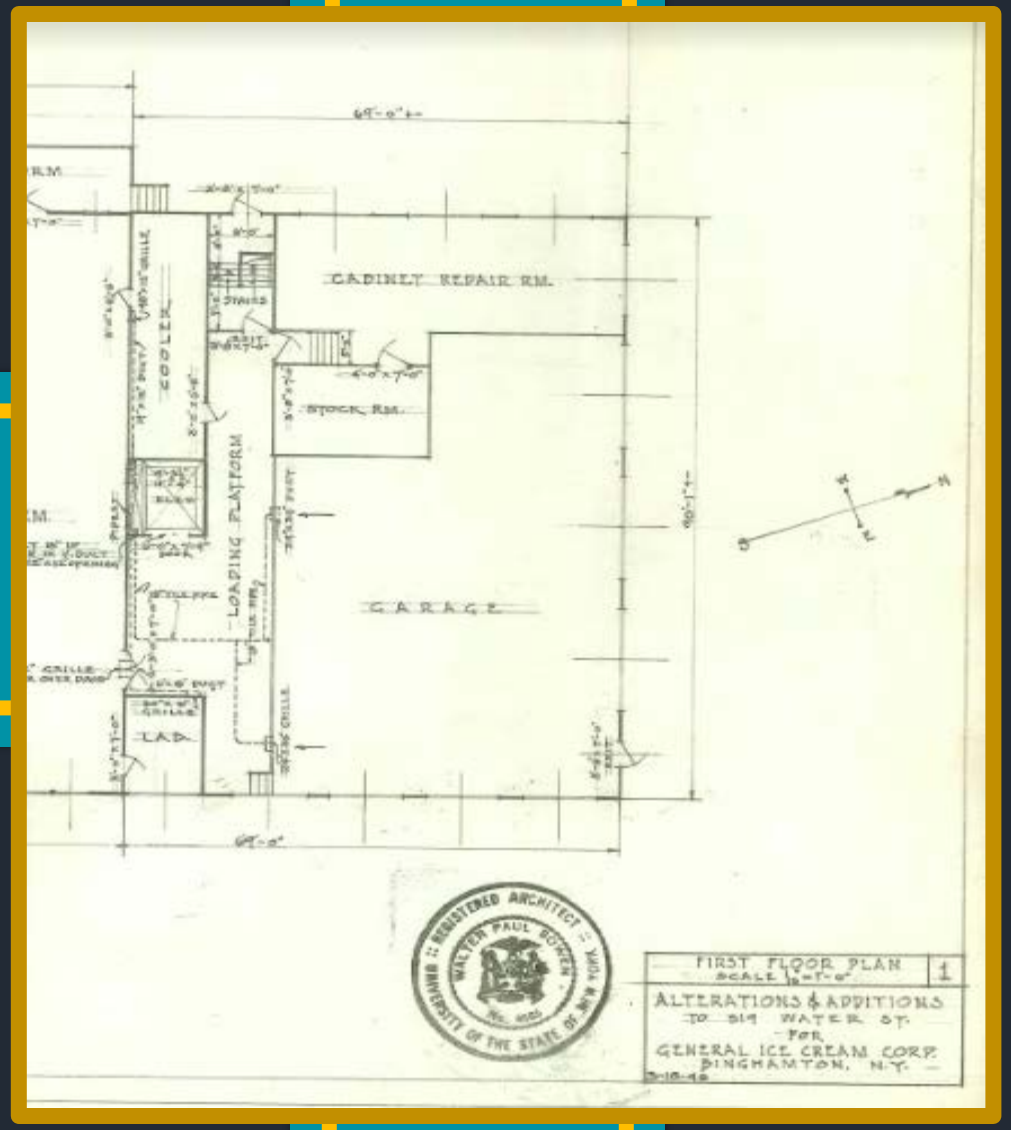
THE IMPORTANCE OF AUDIENCE ENGAGEMENT

- ★ Goal was to capture the essence of the SUI's pioneering advances and present the concept of its technology in a visual form
- ★ Conducted research to identify the function of individual parts and their modern alternatives





THE SPACE

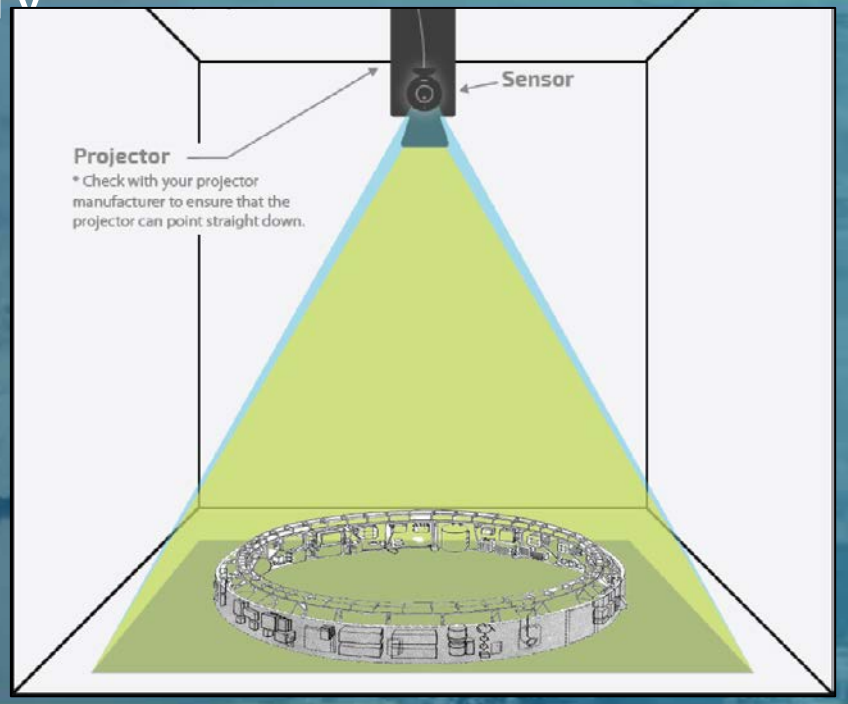


- The entire gallery is ~3000sq/ft
- Ceilings are 18-20ft tall
- The Saturn Instrument itself is 22ft across in diameter

RANGE OF POTENTIAL DISPLAYS

FLOOR PROJECTION

2D Projection on the floor of the Gallery



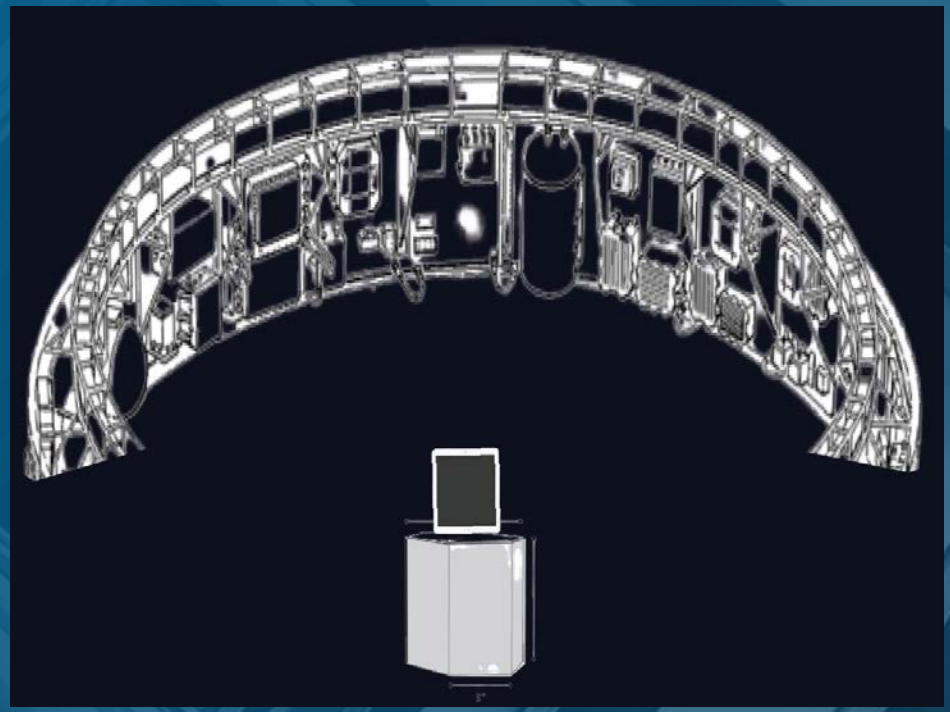
Projection could have an app associated with it → potentially a QR code that would be scanned on a phone and the app would tell you more information about the SIU

*VR headsets were considered and dropped due to staffing and cleanliness concerns

RANGE OF POTENTIAL DISPLAYS

SEMI CIRCLE PROJECTION

A half circle iteration of the SUI with animated images that shift and move as they are projected onto it



Console in the center that allows you to move the image: this would display various nagitavional equipments within the unit and would display its layers

Additional Research being done on:

AUGMENTED REALITY

★ AR without a headset (an idea which we have scrapped) but potentially with a phone instead?

FULL CIRCLE PROJECTION

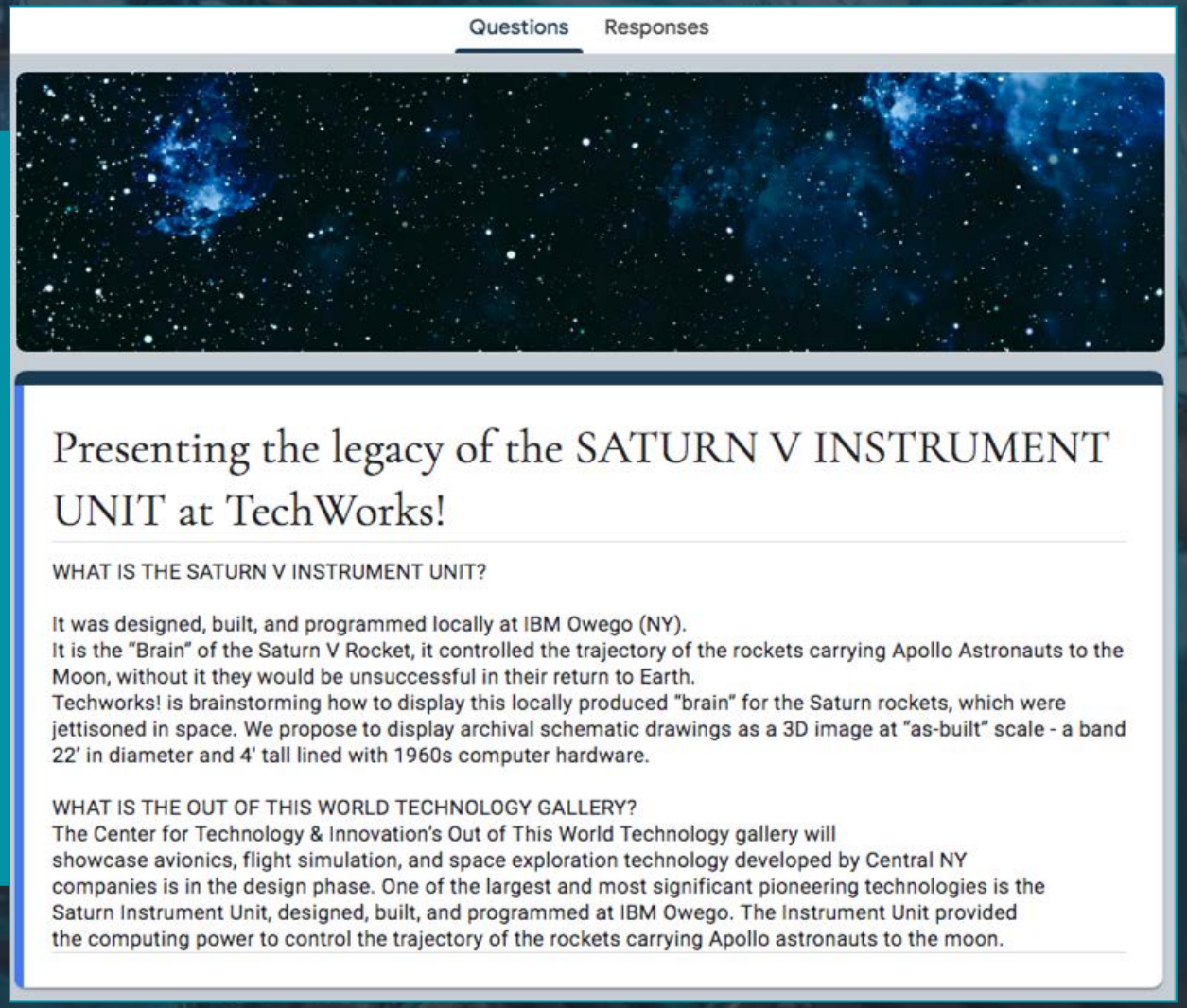
★ Similar technology to the semi-circle but slightly more challenging with the use of a minimum of 4 projectors rather than 2

THE MATERIAL TO PROJECT ON

★ White backlit material, wire mesh

Consumer Survey

- ★ A survey that would be distributed online to those who had signed up for the 2020 NorthEast Astronomy Forum
- ★ Embedded into the TechWorks! website and sent out to TechWorks! listserv
- ★ Will offer Susan a way to gather visitors' opinions before she decides the final projection form



Challenges we faced:

LACK OF CONCRETE FUNDING & TIMELINE

★ All of our ideas had free reign due to our lack of timeframe, budget and space - this made it hard to eliminate certain “unrealistic options” as we had no real limiting factors

OUR ONE CONSTANT IS CHANGE

★ Consistent changes in idea for the projection
★ Consistent changes in technology
- as time goes by technology innovates and changes therefore our research may be outdated by the time our project comes to fruition

LACK OF ENGAGEMENT FROM SOURCES

★ Certain leads we had reached out to ignored our communication efforts

WHAT COULD BE DONE DIFFERENTLY?




WE WOULDN'T CHANGE MUCH but...

- ★ Project Timing is a bit mismatched
  - project will likely not come to fruition for a few years
- ★ Spend more time researching into and creating a 3D miniature of the Saturn V Instrument
  - We had some time that we could have better allocated to make further progress in this aspect of the project
- ★ Conduct further research the material that is most successful for the projection
  - We had begun this research but never solidified an answer

CLIENT DELIVERABLES

IBM DR 27 Saturn IU.png View Download	Drawing of Saturn V Instrument
IMG_20200207_122209.jpg View Download	Gallery color range (walls and ceiling)
IMG_20200207_122219.jpg View Download	Ceiling color
Meeting Notes View	Doc of Meeting notes
Pages 58-87 from IBM_IUSystemDescripAndComponentDataOCR.pdf View Download	Explanation of Parts Saturn V Instrument
Pages 9-34 from IBM_IUSystemDescripAndComponentDataOCR-2.pdf	Explanation of Parts Saturn V Instrument

Slides for Susan.pdf View Download	Intermediary Meeting with Susan to update her on progress
TechWorks! View	Introductory PowerPoint
Techworks! 3d projection Project.png View Download	TechWorks! Banner
Techworks! SIU.pdf View Download	Upgraded slides - Presentation for TechWorks! board meeting
Victoria&Nika Schedules.png View Download	Teams weekly work & class schedules
WeeklySchedule.xlsx View Download	Project GANTT chart

1946 Elevations E S.pdf View Download	TechWorks! Blueprints
1946 Elevations W N.PDF View Download	TechWorks! Blueprints
CM - SM - SIU visible - pre launch.jpeg View Download	A found image in IBM Archives
Edgar Durbin Info View	Edgar Durbin is a volunteer who worked for Paul Ceruzzi, the curator for the Saturn V Instrument Unit at the time that it went on exhibit at Udvar-Hazy Center.
IBM DR 27 Saturn IU.png View Download	Drawing of Saturn V Instrument

post saturn launch grining.jpeg View Download	A found image in IBM Archives
Proposal for TechWorks!.pdf View Download	Our original Project Proposal and Team Compact
ready to launch.jpeg View Download	A found image in IBM Archives
saturn from tower.jpeg View Download	A found image in IBM Archives
Saturn V Image Alabama.jpg View Download	Image of instrument from museum in Alabama
Saturn V Instrument Wiki View	Much of which was written by Edgar Durbin

GOOGLE SITE DOCUMENTS

- ★ MEETING MINUTES
- ★ CONSUMER SURVEY
- ★ IBM ARCHIVE IMAGES
- ★ PROJECT GANTT CHART
- ★ AFTER ACTION REVIEWS
- ★ INVESTOR POWERPOINTS
- ★ TECHWORKS! BLUEPRINTS
- ★ MUSEUM VISIT OVERVIEWS
- ★ SATURN INSTRUMENT UNIT DRAWINGS
- ★ PROJECT ABSTRACT, OBJECTIVE & CONSTRAINTS
- ★ TEAMS WEEKLY WORK AND PROJECTED SCHEDULE

Thank you!

Any questions?