Proposal Presentation -- Assessment

Team Name: Do you even lift?

Technical Content	Not Acceptable		Average		Excellent
1. Explained motivation for design	1	2	3	4	(5)
2. Summarized scope of design problem	1	2	3	(4)	5
3. Presented market analysis	1	2	3	4	5
4. Presented customer needs analysis	1	2	3	4	5
5. Presented target specifications	1	2	3	(4)	5
6. Presented mission statement	1	2	3	(4)	5

Visuals or Slide Design	Not Acceptable		Average		Excellent
1. Visual appeal of slides	1	2	3	(4)	5
2. Quality of graphs, figures and tables	1	2	3	(4)	5
3. Clear, concise supporting text	1	2	3	(4)	5

Organization of Presentation	Not Acceptable		Average		Excellent
1. Summarized scope of talk at the beginning	1	2	3	4	(5)
2. Communicated purpose of presentation	1	2	3	(4)	5
3. Appropriate tone for audience	1	2	3	(4)	5
4. Organization of content	1	2	3	(4)	5
5. Finished with a convincing conclusion	1	2	(3)	4	5

Oral Presentation Quality	Not Acceptable		Average		Excellent
1. Team's confidence and enthusis	1	2	(3)	4	5
2. Team's control of Q&A and quality of responses	1	2	3	4	5
3. Presentation length	1	2	3	(4)	5

Individual Assessment

Mark X in areas that are AVG. or BELOW AVG.

Name:	Invidual Presentation Score: (1-5 as above)	Well Pr	Eye Co	Voice Q	Body L	Questions
1. Charles	3					X
2. Rebecca	3.5			X		
3. Arpit	4	X				
4. Andres	4.5					
5.						
6.						

Comments: _____

One thing the group did particularly well: Good images and tables

One thing that could be improved: It was easy to get a bit lost in your design spec slides with so many

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chicks

Question 1: Why is the optimal length of time 30 Days?

Question 2: Is Aortix currently used in patients? How is it removed?

Team Name: Do you even lift?

Question 1: Why is surgery not done on babies?

Question 2: Is the lift you are planning corrective or procedural?

Team Name: Aerolite

Question 1: Are all of the parts put in the larger plane at once?

Question 2: Do you need to meet all of the requirements to be successful?

Team Name: Shell Shock

Question 1: Do you need to protect the PCB from temperature cycling? How does 3D printing do this?

Question 2: Do you have criteria of how much space this can take up

Team Name: _____

Question 1:

Question 2:

Proposal Presentation -- Assessment

Team Name: Do you even lift?

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1. Explained motivation for design	1	2	3	4	(5)
2. Summarized scope of design problem	1	2	3	(4)	5
3. Presented market analysis	1	2	3	(4)	5
4. Presented customer needs analysis	1	2	3	(4)	5
5. Presented target specifications	1	2	3	4	(5)
6. Presented mission statement	1	2	3	4	(5)

Visuals or Slide Design	Not Acceptable		Average		Excellent
1. Visual appeal of slides	1	2	3	(4)	5
2. Quality of graphs, figures and tables	1	2	(3)	4	5
3. Clear, concise supporting text ← bigger font for bullets	1	2	(3)	4	5

Organization of Presentation	Not Acceptable		Average		Excellent
1. Summarized scope of talk at the beginning	(1)	2	3	4	5
2. Communicated purpose of presentation	1	2	(3)	4	5
3. Appropriate tone for audience	1	2	3	4	(5)
4. Organization of content	1	2	3	(4)	5
5. Finished with a convincing conclusion	1	2	(3)	4	5

Oral Presentation Quality	Not Acceptable		Average		Excellent
1. Team's confidence and enthusis	1	2	3	(4)	5
2. Team's control of Q&A and quality of responses	1	2	3	(4)	5
3. Presentation length Don't say "I" say we when answering?s	1	2	3	4	5

Individual Assessment Mark X in areas that are AVG. or BELOW AVG.

Name:	Invidual Presentation Score: (1-5 as above)	Well Pr	Eye Co	Voice Q	Body L	Questions
1. Andresa	3			X		
2. Rebecca	3			X		
3. Arpit	4					
4. charles	4					
5.						
6.						

Comments: Keep volume up and slow down when presenting

One thing the group did particularly well: did liked the pie chart on the needs slide

One thing that could be improved: The numbering of design specs and division between slides was confusing

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Bacwarmers

Question 1:
You mentioned that there are few trained technicans, does it require a trained person to do the BD assay?

Question 2:
How does the BD assay work?

Team Name: Do you even lift?

Question 1:
~~Still not clear~~
Did you consider working on a no-surgical approch like the suction device

Question 2:
yes it sounds barbaric, but do you have proof for why current procedure needs improvement?

Team Name: Aerolite

Question 1:
So plane is remote controlled?

Question 2:
Is safety defined as no damage or loose parts?

Team Name: Shell Shock

Question 1:
Is standard AM feedstock material going to provide sufficent protection to PCB?

Question 2:
Will the bond be a weak point, how do you plan to overcome that problem?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Baawarmers

Question 1: You mention a $45 capita, but why is your low cost range up to $150? Why not $45?

Question 2: In the developing world, there are a lot of power surges that can affect your system. What do you plan to do to avoid this?

Team Name: Do You Even Lift?

Question 1: What exactly is wrong with the current procedure? You show how the surgery works for pectus excavation, but not why it needed to be improved. (Sorry, explained later)

Question 2: Is the bar ever removed? Or does it permanently stay in the body?

Team Name: Aerolite

Question 1: Does the plane fly by controller or autonomously?

Q3: Are you allowed to use toy/hobby components, or must it all be built from scratch?

Question 2: Will the additional Segments help win the competition? Or are they for different purposes?

Team Name: Shell Shock

Question 1: What resonant frequency are you looking at? Is there a range you need to cover?

Question 2: How did you get to test your prototypes?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: The Aortix Chicks

Question 1: Why ~~you~~ can you only target the stage III - early stage IV patients? - may be useful to explain solution b4 explaining target market.

Question 2: ~~How~~ Is it possible that the anchor might scar the blood vessel? Or that the pump may shear blood ~~vessels~~ cells?

Team Name: Do You Even Lift?

Question 1: What materials will you use for biocompatibility?

Question 2: Maybe a stupid question: but how does the ~~sternum~~ stay in place after being lifted

Team Name: Aerolite

Question 1: What is a fuselage?

Question 2: What are ~~prev.~~ previous strategies for balancing ~~load~~ load, ~~speed~~, assembly?

Team Name: Shell Shock

Question 1: ~~At~~ What temp do PCB components begin to melt? ~~As~~ I'm assuming it's before the actual melt temp?

Question 2: What is additive manufacturing? Also what are the melt temps for PLA and ABS?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chicks

Question 1: Is the current 6mm pump being used in patients? Where is it in the design process?

Question 2: What happens after 30 days of use? You mentioned something about 30 days of use, but didn't say what happens when 30 days are up. Do you have to replace the battery?

Team Name: Do you even lift?

Question 1: Can you describe the user defined scale in the design specs? Are you going to do a survey?

Question 2: Wouldn't lifting the sternum all at once break the ribs?

What are the various components required by the device. You mention pressure sensors, etc. but what are the components/ subsystems?

Team Name: Aerolite

Question 1: What does the safety inspection entail? What exactly are the regulations?

Question 2: Could you provide an overall rubric of the additional requirements of the competition? (height, time requirements? ; how much they factor into score)

Team Name: Shell Shock

Question 1: Did you define PCB before you used the acronym?

Question 2: Why 3D printing rather than another alternative solution?

How would you simulate higher forces (forces higher than just dropping off of building)?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Bacwarmers

Question 1: Incubators require a lot of power and current power to maintain temperature, how will you accomplish this with an unreliable power supply, ask back up generators would be costly?

Question 2: How did you determine a market share of 35%? Are there competing ~~projects~~ devices?

Team Name: Do you even lift?

Question 1: What is wrong with the current procedure/what are you doing? (you bring this up later but after market analysis ~~with~~ which seems out of place)

Question 2: How long does ~~Does~~ the bar stay in the patient?

Team Name: Aerolite

Question 1: You mention the plane needing to account for high winds, wouldn't you want your plane to be able to withstand a range of environmental conditions?

Question 2: How is the plane controlled?

Team Name: Shell shock

Question 1: Do you think that your device/method will be general enough to include all of the market segments?

Question 2: is the standard AM filament going to sufficiently protect the PCB?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chicks

Question 1: What will be the projected price per unit?

Question 2: Does the pump not impede blood flow in the installed vein?

Team Name: Bac Warmers

Question 1: Have you considered how much each individual unit will cost to build?

Question 2: What is a blood culture?

Team Name: Do You Even Lift

Question 1: What are some of the health implications of this condition?

Question 2: What are the dangers of this product if it malfunctions?

Team Name: Acrolite (Our own team)

Question 1:

Question 2:

Team Name: Shell Shock

Question 1: What are some of the materials that these PCB supports are made of?

Question 2: Is this product able to be commercialized A.K.A. can it be sold in stores?

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: AORTIX CHIX

Question 1: Can you give more background on heart failure? Is it reversible?

Question 2: What happens after 30 days? New Aortix? How does this treat / solve problems?

Team Name: BACWARMERS

Question 1: Can you explain more about the role that incubators play in diagnosis of BSIs?

Question 2: Are there any other uses for these (other than BSIs)?

Team Name: DO YOU EVEN LIFT

Question 1: Is the deformity apparent from birth or does it develop sometime between age 5 and 19?

Question 2: Is your solution geared toward younger or older patients? (asking b/c of difference btwn cartilage strength)

Team Name: AEROLITE

Question 1: Are there any material constrictions for either of the planes?

Question 2: Is there a minimum # of subassemblies for the production plane?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix chicks

Question 1: Does heart failure always progress among stages, or do some people stay at stage I/II? Is 2.3 million expected to grow?

Question 2: Are you essentially planning to redesign the device to be smaller? Why did you rule out less intensive alternatives?

Team Name: Bac Warmers

Question 1: How different is the technology between an incubator and kitchen appliances (refrigerator, toaster oven, etc.)?

Question 2: How can you modify existing incubators to reduce cost for the developing world?

Team Name: Do you even lift?

Question 1: Is the device intended to be primarily mechanical? (Does the bar installed during NUSS remain in the patient?)

Question 2: Have you considered any alternatives so as to not require an invasive procedure? Along the lines of the vacuum.

Team Name: Aerolite

Question 1: How will your team organize to ensure a good design for both planes during the year?

Question 2: What kind of electronics will be on your planes to allow them to fly autonomously?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Bac warmers

Question 1: What are comparable products on the market?

Question 2:

How is the incubator going to work with the rest of system?

Team Name: Do You Even Lift?

Question 1: What does factor of patient safety even mean? Perhaps I missed it, but it seemed vague to me

Question 2: What does your current timeline look like?

Team Name: Aerolite

Question 1: Why is this competition important? (This question was sort of answered, very late in presentation - try making it clear early on)

Question 2: Who are the end "users" of these planes?

Team Name: Shell Shock

Question 1: Where are the prices (per device) in the market analysis coming from? Assumptions?

Question 2: What is MIC document? key points from that document? (was kind of glossed over in presentation)

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chicks

Question 1: What does your anchoring process look like?

Question 2: How many hospitals currently have access to Aortix?

Team Name: Bac Warmers

Question 1: How much is a current incubator?

Question 2: Are there any competitors?

Team Name: Do you even lift

Question 1: What does your design do to create a safer procedure?

Question 2: What are the long term drawbacks of not treating

Team Name: Shell Shock

Question 1: What does additive manufacturing mean.

Question 2: What is so bad about reaching resonance because if you go beyond it.

Team Name: Aerolite

Question 1:

Was our team?

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chix

Question 1: Why is the goal for it to work for only 30 Days?

Question 2: Are there any other factors that affect hemolysis besides just decreasing the diameter

Team Name: Bac Worms

Question 1: will method of incubation be the same as other currently existing ones, or will it change?

Question 2: will the developing world be ready for culturing if only get incubator.

Team Name: Do you even lift

Question 1: Are you still planning for doctors to lift, or is there a goal for the crane to be modified

Question 2: Does rate of lift add any affect to the outcome or per after

Team Name: Aerolift

Question 1: Is there a way to train for the flying, or does a judge fly it?

Question 2: Are there any size requirements on the production airplane

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chicks

Question 1: How is the IABP powered?

Question 2: What is the material of the pump is made of?

Team Name: BacWarmers

Question 1: What size will the incubator be?

Question 2: Is the 35% share for global market?

Team Name: Do You Even Lift

Question 1: What is the bar made of?

Question 2: What are concerns with installment of the bar?

Team Name: Shell Shock

Question 1: How is it placed on the weapons?

Question 2: Will you be provided the PCBs to test protector?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chicks

Question 1: How can you guys ensure safety?

Question 2: Who would be your closest competitors?

Team Name: BacWarmers

Question 1: How much would the product sell for?

Question 2: Who would your competitors be?

Team Name: Do You Even Lift

Question 1: How do you plan to put a uniform force? On the ribcage?

Question 2: How much would the product cost per procedure?

Team Name: _____

Question 1:

Question 2:

Team Name: Shell Shock

Question 1: How did you exactly estimate your market value?

Question 2: How exactly would you bond to a PCB?

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chicks — Sepia, Brown, Black, Tan, White

Question 1: How does self-anchoring technology work

Question 2: What do you mean by "not as safe as it could be"?

Team Name: Bac Warmers — Blue, Teal, Sea Foam Green, Black, White

Question 1: How will your device function "during blackouts and brownouts"

Question 2: How will you maintain 35°C ± 1°C as a ~$150 device?

Team Name: Do You Even Lift — Blue, Black

Question 1: You say "minimally invasive surgery" but then you are inserting a metal bar inside the person?

Question 2: How will you address the 37% of Bar Related Events? "It is very barbaric" - good pun

Team Name: Aerolite — Plaid, Black, Kaki

Question 1: ~~Brady why did you wear the wrong color shirt~~ How many teams will be competing this year?

Question 2: Will the Gatorade bottle be filled with a fluid?

Team Name: Shell Shock — White, Black, Maroon

Question 1: 10,000 G's? Are they insane?

Question 2: What is all of their budget going into?

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chiv

Question 1:

Is the Aortix currently in use? How common?

Question 2:

How long will this work

Team Name: Do you even lift

Question 1: How common is the procedure? How often is it left untreated?

Question 2: Why hasn't there been improvements to the procedure in the last 30 years?

Team Name:

Plane Competition

Question 1: Does the entire plane fit in the big plane? Disassembled?

Question 2: How will you test before the competition (course?)

Team Name: Shellshock

Question 1:

Which is priority, shell shock or [illegible]

Question 2:

Team Name:

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chics

Question 1: What's an LVAD? (Say the full name when first used in intro slide)

Question 2: How will you be making the power supply in conjunction with the pump – electrical safety

Team Name: Do you even lift?

Question 1: What was the total financial opportunity?

Question 2: What are the details to the customer needs specifications? What are the FDA regulations that pertain to this design.

Team Name: Aerolite

Are needs/specifications listed in order of priority?

Question 1: ~~How will this scale up to a "plane within a plane"?~~ Do the winning designs scale up wrt. to testing a new plane in a remote location?

Question 2: How many people can assemble, with what tools (if any) during the competion?

label the rightmost column of the user/customer needs (what is high/medium) etc.

Team Name: Shell Shock

Question 1: What is additive manufacturing? (Should clarify it IS 3-D printing)

breakdown

Question 2: What is the current resonant frequency what range of frequency PCB needs to be beyond?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down AT LEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chicks

Question 1: What kind of FDA regulations will it have to meet?

Question 2: Is it possible that it could fail and hurt the patient in any way?

Team Name: BacWarmer

Question 1: What did you base the $150 goal on?

Question 2: What ideas do you have so far?

Team Name: Do You even Lift?

Question 1: Is the Nuss method the most often used?

Question 2: Does Nuss have lowest possibility of complications?

Team Name: Shell Shock

Question 1: Do you have any current ideas of how this will work?

Question 2: How many Gs can an untreated circuit board take - is this new method mainly for gov't?

Team Name: Aerolite

Question 1:

Our team

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Aortix Chicks

Question 1: How will you ensure that no blood cells will be shared?

Question 2: What entails FDA compatibility?

Team Name: Bac Warmers

Question 1: How will you do a stability survey for people in the developing world?

Question 2: Will profits / costs change moving to different parts of the developing world.

Team Name: Do You Even Lift

Question 1: Why would this surgery be considered elective if it could affect the heart + lung function?

Question 2: If this procedure has potentially life threatening complications, why do the surgery at all?

Team Name: Aerolite (our team)

Question 1:

Question 2:

Team Name: Shell Shock

Question 1: How do you expect to resist 10,000 G's? Is there anything exist on the Market that can do this?

Question 2: How will the 3D printed supports be attached to the PCB?