

RFQ 1038 Questions and Answers Updated 2/19/20

Q 1. Please confirm that the shop drawings should be stamped by a registered State of Michigan Structural Engineer.

A 1. Confirmed, shop drawings should be stamped by a registered State of Michigan Structural Engineer.

Q 2. Maintenance of the vertical lift motor is performed at apron level on our bridges so we do not require roof access or routine maintenance on the roof. Therefore, a service ladder and roof top handrails are not required on our bridges. The other compliant fall protection listed in the specification will provide the required safety needed should someone wish to access the roof. We kindly ask for an exception to this requirement as it is not necessary and will result in a cost savings to the customer.

A 2. Acceptable.

Q 3. Maintenance of the vertical lift motor is performed at apron level on our bridges so we do not require roof access or routine maintenance on the roof. Therefore, a service ladder and roof top handrails are not required on our bridges. The other compliant fall protection listed in the specification will provide the required safety needed should someone wish to access the roof. We kindly ask for an exception to this requirement as it is not necessary and will result in a cost savings to the customer.

A 3. Acceptable

Q 4. Our standard interior rain gutter is manufactured from extruded rubber and due to the manufacturing process, it is only available in solid black or yellow. We kindly ask that you accept our standard rain gutters in black or yellow.

A 4. Acceptable

Q 5. Our bridges do not require the periodic tunnel roller adjustments like others. Because of this, our rollers are set at fixed points to the angle and do not move out of adjustment during use. Since the rollers are fixed with respect to the angle, any ice that forms along the angle is sheared off by the roller as it passes along. We have stopped using ice scrapers in all projects in the US and Canada 10 years ago, and have not had any problems with ice. Due to this fact, we kindly request leaving the ice scrapers off if the rollers are fixed.

A 5. Acceptable

Q 6. Our bridges use a standard tunnel design that consists of the exterior side, roof, and floor panels manufactured from 14 gauge galvannealed steel panels attached to a framework of angle and tubing. These panels are formed, welded, caulked, sealed, and painted to form the steel weather tight



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enclosure and an appealing finished appearance. Strength is derived from the formed sheet metal ribs, while the flat exterior walls provide a pleasing architectural appearance. This standard is successfully in use at many airports throughout North America including Chicago, Philadelphia, JFK, LaGuardia, Baltimore, Newark, Calgary, Edmonton, and Toronto. We kindly ask approval of our standard in order to provide a competitive bid for this project.

A 6. All intersecting steel planes of exterior shall be 100% welded. Caulk shall not be used to provide winter seals.

Q 7. Our standard wheel loading is 303psi. We kindly ask that you accept our standard wheel loads.

A 7. Acceptable

Q 8. Our standard solid rubber tire is a cast wheel that is manufactured by OTR Wheel Engineering. This wheel has been in use on our PBB for 10+ years at airports across the US and Canada. OTR is a 30 year old company and has served the PBB industry for many years. Please confirm acceptance of our standard wheel manufacturer.

A 8. Acceptable

Q 9. Our vertical drive consists of two (2) extra capacity hydraulic rams. Each ram is independent of the other and capable of supporting the bridge under full design load. An adjustable flow control valve provides the required lift speed. The design includes internally mounted pilot operated check valves that prevent the bridge from descending in the event of fluid loss or other system failure. Mechanical stops in the cylinders prevent over travel and do not cause any damage should they be reached. A single hydraulic power unit prevents miss-calibration as seen on Ball Screw designs and it is mounted at the wheel cross-member for easy access for maintenance. We have been using this system for the last 20 years successfully. They require much less maintenance and will last the life of the bridge without major overhaul, unlike ball screw assemblies that have to be torn-down and resurfaced near ten years of service.

A 9. Acceptable

Q 10. Our standard design eliminates the need of a platform for the operator to stand on while rotating the cab. The rotating portion of our cab is deep enough for an operator to stand and remain next to the control console at all times while performing any movement or operation of our PBB. We kindly ask that you accept our standard design.

A 10. Acceptable

Q 11. We kindly request an exception to the requirement for independent activation of the right/left sides of the canopy. We use a specially-designed canopy deployment mechanism that precludes the



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possibility of applying excessive force to the aircraft fuselage. Self-contained struts limit the maximum pressure applied to the aircraft, making a pressure sensor unnecessary. The struts provide sufficient pressure to extend the canopy and maintain a complete seal with the aircraft fuselage without applying additional contact pressure. Each side lowers independently and stops automatically when contact is made with the aircraft. In addition, a strap is used to control lowering and to raise the canopy.

A 11. Acceptable

Q 12. Our standard service stair handrail assembly is constructed as one piece section and is easily removable. It is not separated into separate sections. We kindly as that you allow our standard handrail assembly to be allowed.

A 12. Acceptable

Q 13. We no longer offer a catering gate handrail modification. We do offer a chain barrier for a bag slide system where the bottom and middle handrail are removed, and the center handrail is the chain. The top handrail remains in place. We only provide this option if the stair has a bag slide. Kindly allow our standard to be allowed.

A 13. Acceptable

Q 14. We use painted, galvannealed steel sheets for the ceiling panels instead of aluminum plank-type ceiling panels. The material is processed at the steel distribution warehouse and is formed in long continuous coils and cut to the width that we require. It comes pre-painted (coated) in the color that we specify. We kindly request approval of our standard.

A 14. Acceptable – Owner specified color

Q 15. Our standard HEMPEL paint system has a similar preparation and coating as requested in the specification. We believe that our standard paint system not only meets, but exceeds the requested system and we kindly ask for acceptance of our standard paint. Additionally, our HEMPEL paint system carries a standard 10 year warranty.

A 15. Acceptable – Performance standards must be equivalent

Q 16. Gates A2, A4, A6

- 1. In the pre-bid meeting it was discussed that the A2 and A6 bridges could be left in place during the building face re-work. Please confirm if our pricing should include a remove and reinstall of A2 and A6.
 - A 16 1. The extended corridor section of the PBB will require modification to accommodate the building face rework (corridor section will shorten by approx. 8"). This modification may require the PBB to be taken down while the building face rework is taking place.
- 2. If/When the bridges are removed can they be stored at the gate or are they to be removed to a remote location?
 - A 16 2. Bridges will be left within the work area.



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Q 17. Gate A2 and A6

Are the existing extended corridors to be re-worked or to be provided new with the new dimension?

A 17. The contractor can rework existing or provide new to meet the design intent.

Q 18. Walkways and Corridors that are not used in the final plan e.g. the temporary walkway for A5, are they to be left at site or removed and scrapped?

A. All temporary structures are to be removed.

Q 19 Price Proposal Form

- As there is a potential take down and store for A2 and A6 are those costs, please modify the form to include A2, A4 and A6
 - A. Confirmed. This form will be updated.
- Please confirm the A5 Permanently Relocate is to Gate A7
 A. Confirmed. See design documents.
- Are the walkways to be included with the A7 Temporary Move?
 A. Yes.
- A14 calls for a new bridge, please confirm if the PBB from A7 is to be moved to this Gate.
 A. Yes; existing A7 will be moved to new A14. See AP-2.0.

Q 20. 1.05.C.2.e.2 Page 4 calls for the shop drawings to be stamp by a Colorado Structural Engineer, as the equipment is designed and built in Utah can the specification be changed to the State in which the equipment is manufactured?

A 20. Acceptable.

Q 21. 1.12.Y.2 and 1.12.Y.2.a.1 Page 21 & 22

There is a conflict with these two sections. Which system is required for this project, an electric strike or a maglock system?

A. 21 See revised section in forthcoming addendum documents.

Q 22. 1.12.Y.6 Page 22 asks for the Service platform handrails shall incorporate industry standard "catering gate" handrail modifications

JBT does not offer the catering gate option. We do have a chain assembly that spans the middle rail but leaves the top and kick plate portion of the handrail assembly in place. The middle chain is unlatched to provide access to bag slides and/or bag conveyors (loader). Is this acceptable?

A. 22 Acceptable.

Q 23. 1.12.AA.1.c Page 23 Baggage valet equipment will be installed on the fixed walkway.



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The drawings do not show Bag Valet equipment mounted on the walkways. Is this circuit breaker for the Bag Valet required?

A 23. See revised section in Addendum documents.

Q 24. 1.12.AA.24.a Page 25 All interior and exterior lighting shall have a color temperature of 5000K.

Our standard color temperature for lighting is between 4000K to 4100K.(Cool White). 5000K is more like closer to Daylight. Is the 4000k temperature acceptable?

A.24 Acceptable.

Q 25. 1.12.AA.24.b Page 25 Interior lighting shall include the lighting in the cab/bubble and rotunda areas. The

level of illumination shall be 200 lux at the finished floor level with the weather door closed.

Due to tunnel design there are non-traffic area where the levels are below 200 lux. We can meet an average level of 200 lux.is this acceptable?

A 25. Acceptable.

Q 26. 1.12.AA.24.c Page 25 Tunnel lighting shall be provided by recessed LED panel fixtures with diffusers. The fixtures shall be 4 feet long and shall be positioned parallel to the tunnel centerline on a maximum of 8-foot centers or less as required to meet specified lighting levels. ...The level of illumination within the tunnels shall be uniform at 200 lux at the finished floor level.

JBT standard lighting layout is 12 foot centers between fixtures. The span between fixtures is 8 foot. This configuration will achieve the average light level of 200 lux. Please allow our standard light spacing.

A 26. If alternate spacing meets average light levels, this is acceptable.

Q 27. 1.07.D. We use IEC rated contactors and circuit breakers in our PCA units as indicated in 2.7.0.3. Is this acceptable?

A 27. Acceptable.

Q 28. 2.04.B.2. An inlet Butterfly damper is mentioned. Inlet butterfly dampers are not used on JBT PCA units. Is this acceptable?

A 28. Acceptable.

Q 29. 2.04.F. The construction of the Dx POU units shall be of a material of a non-corrosive nature. The JBT is manufactured using a powder coated steel frame with aluminum covers and louvers that are powder coated for corrosion protection. Please accept our standard?

A.29 Acceptable.

Q 30. 2.04.I. The blower wheel shall receive a two (2) plane dynamic balance at maximum RPM and the maximum allowable vibration velocity shall not exceed 0.1 inch/second or 0.5 MIL displacement. We use blowers manufactured by Aerovent that are balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Fan Application Category BV-3 is equal 0.15 in/second. Please accept our standard.

A 30. Acceptable.



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Q 31. 2.06.D.3. All wiring shall be terminated on terminal blocks and/or suitable connectors. Our standard for spare wires is to cap them with heat shrink tubing and neatly secure them in the wire-way system inside the control panel. We will consider the heat shrink cap as a suitable connector. Is this acceptable?

A 31. Acceptable.

Q 32. 2.06.D.4. The specification requires that all wiring shall be in conduit (preferably automotive split loom) or spot tied and shall be routed away from possible pinch points. We do not use conduit or automotive split loom but cable within the body of the PCA units and spot tie all cable, is this acceptable?

A.32. Acceptable.

Q 33. 2.06.D.5. All meter panels and any components containing printed circuit boards or solid state electronics shall be shock mounted. We have components inside our PCA unit that contain circuit boards that are not shock mounted. These components are mounted per the manufacturer's recommendations. Please accept our standard mounting.

A 33. Acceptable, assuming components used in DX PCA unit are rated for vibration/shock imparted by DX unit.

Q 34. 2.06.D.9. All exterior conductor/cables shall be in conduit. Exposed cables will only be allowed where required due to flexibility needs and then will be limited to a maximum of 48". We use cables because of flexibility requirements but the length is not limited to 48". NEC permits the use of full run exposed cables when flexibility is required. Please allow our standard.

A 34. Acceptable.

Q 35. 2.07.A.1. Hermetic sealed scroll compressors with integral vibration isolators are required. We solid mount the compressors in our PCA unit per the manufacturers recommendations. Low/high refrigerant pressure cutouts with manual reset are required. We use low and high refrigerant pressure cutouts that are automatic reset. A low oil pressure cutout with manual reset is required. We cannot provide a low oil pressure cutout because the scroll compressor is not provided with an oil pressure cutout. Please allow the compressor standard.

A 35. Acceptable.

Q 36. 2.07.A.3. Vibration isolator/absorber with wire mesh-covered metallic bellows shall be installed in the suction and discharge line to isolate/absorb the compressor vibrations. Vibration isolators are not included in our design due to the potential for leaks. We pipe our units with vibration loops. Please accept our standard.

A 36. Acceptable.

Q 37. 2.07.D.1. The condenser fan assembly used has a variable speed DC motor. Please accept our VFD Condenser fan with non-spark proof blades.

A 37. Acceptable.

Q 38. 2.07.M. A thermostatic expansion valve is required. We will comply by providing an electronic expansion valve in lieu of the thermostatic expansion valve. Please allow our standard.

A 38. Acceptable.



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Q 39. 2.07.O.1. The controller shall be based on a 32 bit microprocessor and utilize flash memory technology to store operation parameter information. We shall provide our standard PLC. Please allow our standard.

A 39. Acceptable.

Q 40. 2.07.O.3. Contactors shall be AC operated with 120V 50/60Hz holding coil. The contactors used in the JBT PCA units have 24VDC coils. Please accept our standard.

A 40. Acceptable.

Q 41. 2.07.S.1. The condensate pump requires a different voltage than our standard pump. We use a 24VDC pump that meets the flow requirements but uses a smaller motor than 1/3 hp. Please accept our standard.

A 41. Alternate pump voltage is acceptable if sized to adequately remove condensate generated by unit.

Q 42. 2.08.D.1. shows the maximum dimensions for Class III PCA units to be 120" length, 90" width, and 45" height. Our current small frame units are 167" length (frame), 88" width (frame), and 43" height. The units will not restrict service to the design aircraft are our dimensions acceptable?

A 42. Acceptable.

Q 43. 2.09.B. Factory mass flow tests shall be conducted for each size of Dx POU units at design ambient conditions with a test apparatus whose resulting calculated mass flow has been certified by the NEBB Agency or other approved Agency. We use a test device manufactured in accordance with ASME MFC-3M-1989. The unit performance ratings are based on SAE ARP 5374. Is this acceptable?

A 43. Acceptable.

Q 44. Article 11 of the Terms and Conditions AIA A232 and Exhibit D has insurance requirements. Can we assume that Exhibit D takes precedence?

A 44. Exhibit D are the correct insurance requirements

Q 45. EXHIBIT D

Paragraph 1 - We would require any of our subcontractors to provide their own insurance in accordance with the Prime Contract and this Contract. We would not purchase Independent Contractor's Protective Liability insurance for them. Is this acceptable?

A 45. The insurance minimums listed will be required for the Prime Jet Bridge Contractor. Subcontractor Insurance policies will be the Prime Jet Bridge Contractor's responsibility.

Q 46. Exhibit D

Paragraph 3 – We do not provide certified copies of insurance policies as these are company confidential, however, we can provide Certificates Of Insurance, Will Certificates Of Insurance be acceptable?

A 46. The Authority reserves the right to request a complete certified copy of the policies.

Q 47. If AIA A232 Article 11 applies:

• 11.1.3 – There is no certificate issued evidencing continuation of liability coverage. The certificate remains in force until policy expiration and will be renewed and re-issued at such time. Is this acceptable?



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- 11.3.1 Please clarify what "without optional deductibles" means with respect to Property coverage because we carry significant deductibles on that as well as a deductible on the builder's risk/installation portion of the property coverage.
- 11.3.1.1 Is it acceptable to delete the phrase "without limitation" and replace with "but not limited to" as this clause is representing what the policy will cover.
- 11.3.2 Just clarifying that GFIAA cannot be named insureds as indicated in this
 clause. Property is a First Party coverage and GFIAA can be listed as Loss Payee as their interests
 appear
- 11.3.10 Please confirm that GFIAA is only referring to policies with which GFIAA will have the power to adjust and settle and loss with insurers.
 - A 47. Contract negotiations will take place following contractor selection.

Q 48. Section 11 8502 POU DX PCA Units

2.07.C

Q. Our standard design incorporates vibration isolators on the discharge lines only. May our standard be accepted?

A 48. Acceptable.

2.07.T.2

Q. Twist Aero manufacturer's our own hoses. The construction and quality performance is equal to or better than the specification requirements. May Twist Aero be considered an approved manufacturer?

A 48. Acceptable.

Q 49. Section 11 8561 SOLID STATE FREQUENCY CONVERTER

2.01

Q. Twist Aero manufactures most all types of ancillary equipment for servicing aircraft which includes Ground Power, Pre-Conditioned Air and Hose Management Systems. All of our products are fully UL Listed and labeled. May Twist Aero be listed as an approved manufacturer of this equipment?

A 49. Alternate manufacturers will be considered as long as the equipment meets the technical specifications and design documents.

2.03.C

Full Load Amperage: 90 KVA Model, 100 amps and 180 KVA model 200 amps. This amperage is based on 0.8 power factor units as indicated in 2.04A.1 and .2.

Q. Our standard design, UL Listed product, is based on continuous 1.0 Power Factor. Thus, our 90 KVA Model would require 150 amps and our 180 KVA model requires 250 amp. Does the airport have any current or future plans to require continuous 1.0 Power Factor units, if so, will the new electrical infrastructure at the gates support the additional amp draw? A 49. Alternate equipment configurations will be considered as long as it works within the electrical distribution system as shown in the design documents.



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Q 50. With the addendum #1 and the bid date change to March 3 will there be an extension to the questions deadline?

A 50. Questions will be accepted until February 21, 2020.

Q 51. As electronic submission is allowed per the RFQ in section 7, can we send a test upload for confirmation of receipt prior to the bid due date? Is there a limit to the file size for the upload?

A 51. A test file is acceptable if clearly labeled as such. File size is limited 100 MB.

Q 52. 6.4 Capacity of the Respondent states; Provide a description of the resources (except for human resources) that the Respondent will employ to perform the work. Include a description of current workload and availability of resources to complete the work and support the proposed work." Can you please clarify the intent? Is it to describe the personnel and their workload and availability?

A 52. A. Describe Company assets like welders and work trucks etc. that will be used to complete the work.

Q 53. The Scope of Services includes several Design Phase and Construction Phase activities where PBB Contractor will be required to coordinate alongside the Terminal Contractor including providing detailed cost estimating and knowledge of marketplace conditions, develop construction phasing and scheduling, set goals for DBE participation and implement the DBE program, coordinate with Owner performed oversight and the Concourse A Expansion Construction Manager, and document control for all communications, documents, submittals, etc. Can you please expand on the level of effort and skillset needed from the PBB Contractor to complete these activities alongside the Terminal Contractor.

A 53. PBB Contractor is expected to provide project management and estimating expertise related to the PBB portion of the project. PBB Contractor is to determine the effort needed to accomplish the requested scope of work.

Q 54. Is either a 5% Bid Bond or letter of Bond ability from our Surety required with the respondents proposal?

A 54. No, however, Performance and Payment bonds will be required upon Notice to Proceed.



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Q 55. Project documents state the project is tax exempt. Please confirm all equipment, materials and products provided for this project are tax exempt and Owner will provide the necessary tax exemption forms.

A 55. The Owner is tax exempt. Contractor is still obligated to pay tax on all materials and equipment which they purchase.

Q 56. Considering that the bid due date has been moved to March 3, 2020, would you kindly consider moving the RFI due date by one week to February 19, 2020?

A 56. Questions will be accepted until February 21, 2020.

Q 57. Please confirm that a bid bond and payment and performance bond are not required. We do not see either one in the bid documents.

A 58. Bid Bond is not required. Performance and Payment bonds will be required upon Notice to Proceed.

Q 58. Please confirm what is to happen with the 2nd existing 5'-6" extended corridor that is not being relocated. Is the PBB manufacturer required to dispose of it?

A 58. One 5'-6" extended corridor will be reused; the 2nd existing 5'-6" will be discarded.

Q 59. Please confirm what is to happen with the 39' fixed walkway at temporary gate A5 and the 75' fixed walkway at temporary gate A8. Is the PBB manufacturer required to dispose of them?

A 59. Contractor to coordinate with Owner on storage or disposal.

Q 60. Please confirm what is to happen with the existing 1'-0" wedge at gate A7?. Is the PBB manufacturer required to dispose of it?

A 60. Yes.

Q 61. Please provide drawings or additional detail for the Gate A2 & A6 extended corridor modification. It is unclear what the exact modifications are or what is required here.

A 61. The extended corridor will be approximately 8" shorter due to the building facade renovation. The contractor is to field modify (or provide new as necessary) reconfigured extended corridors and A2 and A6 as shown in the design documents.

Q 62. Please provide drawings or additional detail for the Gate A4 offset rotunda base plate adapter. It is unclear what this adapter will look like or what the dimensional requirements are.

A62. The offset baseplate is approximately 8". This will need to be field verified and coordinated with the PBB manufacturer.

Q 63. Drawing PBB-1.0 shows the fixed walkway width as "BB" width. Our standard walkway width is 5'-7", the same as our B tunnel. Please confirm that our standard is allowed.

A 63. Acceptable.

Q 64. The drawing package indicates that a tool box is to mounted to the PCA hose basket. Can you please clarify the type and size of tool box that you require?

A 64. Match approximate size and mounting location as existing.



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Q 65. The PBB specification states that a side mounted cable carrier system may be proposed. Drawing PBB-4.2 shows that Pantographs are to be supplied with the new bridges. Our standard side trolley cable conveyance system is able to accommodate all required cabling and does not require the use of a pantograph. Adding a pantograph to our PBB is unnecessary and will only add significant costs. Please confirm that our standard side trolley cable conveyance system will be acceptable.

A 65. Alternate cable carrying system is acceptable.

Q 66. Drawing PBB-3.2, "Temporary Passenger Boarding Bridge Layout – Gate 8". This drawing shows that a new 140kVA SSFC is to be installed on this PBB. Please confirm that existing SSFC will be used and will not be replaced with a new SSFC.

A 66. Relocated 140kVA. See revisions in addendum documents.

Q 67. On February 6, 2020 the Questions and Answers were issued for the project. On February 11, 2020, Addendum 1 was issued which contained the original specifications and did not include any updates per the Q & A'a issued on February. Please confirm that the Q & A's with their associated answers supersede the specification issued in Addendum 1. Z e

A 68. Documents with the latest dating will supersede previous documents in the event of a conflict.

Q 68. It is our understanding that thyssenkrupp's passenger boarding bridge standard design and features will be accepted for this project. Since the specification that was issued was a JBT spec, there may be small items with our design that differ from the spec but undoubtedly meet the performance requirements of the specifications in their entirety. Please confirm that thyssenkrupp's standard design and features will be accepted. Additionally, we will bid in accordance with the specifications as allowed per the Q&A's and addendum.

A 68. Responses which do not meet the specifications will be considered. The deviations from the specifications must be clearly noted and detailed alternate specifications included to allow sufficient evaluation. In case of dispute concerning the true intent and meaning of the specifications, GFIAA shall interpret the same, and this interpretation shall be accepted by the Seller.

Q 69. 2.04.A.4 Input Circuit Breaker: An internal circuit breaker of suitable size shall provide protection from short circuits and allow maintenance personnel the capability of completely removing power from the unit for maintenance purposes. Input circuit breaker shall be lockable in the off position.

<u>Question:</u> Our GPU utilizes a fused disconnect inside the front panel door. Can this please be accepted in lieu of the circuit breaker?

A 69. Acceptable as long as disconnect switch is lockable in the off position.

Q 70. 2.06 A. Remote Control Station:

1. The control station shall be housed in a NEMA 4X stainless steel enclosure, and shall



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operate on 24 volts or less and shall be located on the bridge lift column (aircraft side of the bridge), so as to be accessible from ground level. Coordinate this position with all other installed equipment and ancillaries so as to prevent interferences. The station shall be configured as indicated on the design drawings. Modifications to this configuration must be approved by the Engineer.

2. The control station shall flash the green on light in the event of a fault.

<u>Question:</u> Our remote operator panel has all user functions and displays located at the PBB lift column. It is a Nema 4 enclosure made from steel that is cleaned, degreased, iron phosphate, primed and powder coated for superior corrosion protection. Can our standard design please be accepted?

A 70. Acceptable.

Q 71. 2.08.E. Lamp Test. A lamp test push-button when depressed shall test all door mounted light indicators and digital display segments.

<u>Question:</u> Our GPU does not utilize a lamp test pushbutton. Our control panel is LCD Display with LED pushbutton indicators. Can this please be accepted?

A 71. Acceptable.

Q 72. 2.09.B.3. The control panel shall be mounted within the NEMA 3R enclosure with provisions included for attaching remote controls.

<u>Question:</u> Our control panel is remotely installed at the PBB lift column to provide easy access to the users and maintenance personnel. Can this please be accepted?

A 72. Acceptable.

Q 73. 2.07.B.1. Manufacturer's standard casing construction, having corrosion protection coating, and exterior finish. Where the Dx POU unit is provided as a unitized enclosure construction, casings shall have removable panels or access doors for inspection and access to internal parts, a minimum of 1" thick thermal insulation, knockouts for electrical and exterior condensate drain connection, and lifting lugs.

<u>Question:</u> Our unit has slide out modules for the cooling section for superior access and serviceability. Can our standard design please be accepted?

A 73. Acceptable.

Q 74. 2.07.F.1 Aluminum plate fins and seamless copper tube. Fins shall have collars drawn, belled, and firmly bonded to the tubes by means of mechanical or hydraulic-expansion of the tubes. No soldering or tinning shall be used in the bonding process. Coils shall have a galvanized steel casing and shall be easily removable for maintenance.

<u>Question:</u> We utilize the latest technology Al/Al microchannel condenser coil on our PCA units. These coils are more efficient, easier to clean and service and allow for a lower refrigerant charge than the older design aluminum fin/copper tube condenser coils. Can the Al/Al microchannel condenser coils please be accepted?

A 74. Acceptable.

Q 75. 2.07.I.1. Inlet air filters shall be factory fabricated by a company regularly engaged and specialized in filter manufacturing. Filters shall be cleanable, encased in a metal



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frame, and rated for the application for which they are being used. The air filters shall meet the following minimum requirements.

- a. Filter media shall be washable, encased in metal frame, at least 1" thick, constructed of galvanized woven and crimp steal screening.
- b. The metal enclosing frame shall be constructed of rigid, heavy duty, and at least 20 gauge galvanized steel.

<u>Question:</u> Our PCA units utilize disposable Class F5 cartridge filters encased in rigid plastic frames. These filters provide superior filtering of the inlet air for maximum passenger protection and are readily available off the shelf items. Can this filter please be accepted?

A 75. Acceptable.

Q 76. 2.7.O. Controls:

1. The PCA Dx Unit shall be provided with a programmable logic controller which shall monitor all phases of operation of the PCA Dx Unit. The controller shall be based on a 32 bit microprocessor and utilize flash memory technology to store operation parameter information. Operation parameters of controller shall not be affected by loss of 60 Hz power to controller. PCA manufacturer shall provide with their bid a detailed description of the controller, type of graphics and software, sequence of operation, types and number of control points, and limitations of the control system they intend to provide and install.

<u>Question</u>: Our PCA unit utilizes direct digital control with software created by our company for dedicated control and communication specific to the PC Air unit. It has ModBus communication via TCP/IP. All set up parameters and information can be done via the remote operator panel and records can be downloaded on a USB stick. Can this please be accepted?

A 76. Acceptable.

Q 77. 2.07.O.4. Contactors shall be full voltage non-reversing type and designed to meet international standards including UL and IEC. Contactors shall be AC operated with 120V 50/60 Hz holding coil and functionally assigned for ON-OFF control.

Question: Our PCA unit utilizes 480V., 50/60 Hz contactors. Can this please be accepted? A 77. Acceptable.

Q 78. 2.07.Q Remote Control Station:

- 1. The control station shall be housed in a NEMA 4X stainless steel enclosure, and shall operate on 24 volts or less and shall be located on the bridge lift column (aircraft side of the bridge), so as to be accessible from ground level. Coordinate this position with all other installed equipment and ancillaries so as to prevent interferences. The station shall be configured as indicated on the design drawings.
- 2. The control station shall have a fault-indicator lamp as follows.
 - a. Flash: non-critical fault, Dx POU unit still operational.
 - b. Steady: critical fault, Dx POU unit prevented from operating.

<u>Question:</u> Our remote control station is a NEMA 4 enclosure made from steel that is cleaned, degreased, iron phosphate, primed and powder coated for superior corrosion protection. We have a yellow LED indication for non-critical faults and a red LED indication for critical fault along with text display showing what the fault is. Can this please be accepted?



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A 78. Acceptable.

Q 79. 2.07.R.2 Cabin Temperature Control:

The controller should have a metallic knob. The controller face should contain a rotated set of tick marks with the lables of "Cooler" and "Warmer" on the extreme ends. The tick marks and lables should be engraved or etched in the controller faceplate. The design should be completed in a manner that simulates the electrical value of the targeted Cabin temperature setpoint when the knob is in the center of the scale.

<u>Question:</u> Our cabin temperature probe does not have a variable controller installed in the cab. The temperature is adjustable at our remote operator station located on the PBB lift column. Can this please be accepted?

A 79. Acceptable.

Q 80. 2.07.D. Maximum Dimensions and Weights: (LxWxH, weight)

1. Class III: (120", 90", 45", 5500 lbs)

2. Class IV: (212", 88", 62", 8300 lbs)

<u>Question:</u> Our Class III PCA unit is 118", 88", 58", 7000lbs. Can these weights and dimensions please be accepted?

A 80. Acceptable.

Q 81. Gate A15 requires a new 75 ton PCA. We do not manufacture a 75 ton PCA. Can we propose a 90 ton PCA as long as it will work with the 250A input?

A 81. A larger size proposed for the PCA will be considered if it works with the electrical distribution equipment as outlined in the design documents.

Q. 82. Gate A15 requires a 180kVA converter with 28VDC. We are not able to incorporate 28VDC into our 180kVA. Can we propose a separate 28VDC unit for that gate?

A 82. A separate 28VDC unit will be considered if it can be accommodated with a single electrical feeder (fed from the 180KVA unit) and works with the electrical distribution equipment as outlined in the design documents.