Appendix C - Airport Building Assessment

C.1 Introduction

The Ohio State University Airport - airport code KOSU - operations and services include conference room rentals, aircraft maintenance and service, and fixed base operator-provided services, such as de-icing and fueling. The Airport has multiple buildings that range from operations to hangars and maintenance buildings. In order to identify the building conditions and their current characteristics for the Master Plan, facility condition assessments were conducted on Thursday, November 9, 2017.1

The facility assessments examine multiple building components including those related to the architectural, structural, mechanical, electrical, plumbing, and safety aspects of each of the structures. Conditions are reported through physical descriptions. Each facility is then given a condition assessment score. These scores are proved to assist the Airport Administration in determining the next steps in improving airport facilities. The parameters for scoring are as follows:

- Poor Condition - This requires major renovation or replacement.
- Average Condition – This requires minor renovations and improvements.
- Good Condition – This requires no renovations but requires minimal improvements.
- Excellent Condition – This requires no improvements or renovations

The Consultant interviewed Mr. Dale Gelter, Assistant Director for Facilities and Airport Operations, while conducting the assessments. The Consultant was escorted by Mr. Gelter’s staff.

C.2 Analysis of Existing Conditions

A total of 23 buildings were assessed by Eric Chambers and Phil Schilffarth of Brandstetter Carroll Inc. on November 9, 2017. The remainder of this report is comprised of brief descriptions and condition assessments for the facilities. The square footage of the 23 buildings consist of the following breakdowns:

- Storage Facilities – 17,300 sf
- Maintenance Facilities – 52,500 sf
- Office with Conventional Hangar – 85,300 sf
- Conventional Hangars – 68,700 sf
- T-Hangars – 131,400 sf

A new terminal is being constructed at KOSU that will include a new aviation education and research facility with state-of-the-art flight simulators, research labs and classrooms, and a modern flight terminal. The new facilities will integrate education with airport operations, benefiting Ohio students as well as Columbus-area residents and visitors. This modern facility will be approximately 29,000 square feet and will replace the existing general aviation terminal (1,929 square feet; administration building (4,687 square feet); and maintenance building (6,186 square feet).

1 A few facilities were not evaluated during this assessment as they are not owned by the University or are in the process of being replaced.
0143 The Paint House
The GSF of this building is 1,100 sf.
The building was constructed in 1948.
This building is in poor condition.

0164 Snow Removal and Equipment Storage Building
The GSF of this building is 15,700 sf.
The building was constructed in 1991.
This building is in average condition.

0195 Airport Storage
The GSF of this building is 12,800 sf.
The building was constructed in 1960.
This building is in poor condition.

0196 T-Hangar A West
The GSF of this building is 10,600 sf.
The building was constructed in 1960.
This building is in average condition.

0197 T-Hangar A East
The GSF of this building is 12,800 sf.
The building was constructed in 1960.
This building is in poor condition.

0198 Hangar 4
The GSF of this building is 29,500 sf.
The building was constructed in 1963.
This building is in average condition.

0235 Flight Laboratory (Hangars)
The GSF of this building is 13,500 sf.
The building was constructed in 1958.
This building is in average condition.

0236 Hangars 1, 2, and 3
The GSF of this building is 29,400 sf.
The building was constructed in 1943.
This building is in average condition.

0237 Airport Maintenance
The GSF of this building is 6,200 sf.
The building was constructed in 1948.
This building is in poor condition.

0238 Hangar 6
The GSF of this building is 5,700 sf.
The building was constructed in 1948.
This building is in poor condition.

0239 Hangar 7
The GSF of this building is 9,900 sf.
The building was constructed in 1976.
This building is in average condition.

0256 Hangar 8
The GSF of this building is 19,000 sf.
The building was constructed in 1980.
This building was in average condition.

0900 Hangar 9
The GSF of this building is 33,100 sf.
The building was constructed in 1986.
This building is in average condition.

0901 T-Hangar C
The GSF of this building is 17,200 sf.
The building was constructed in 1986.
This building is in average condition.

0904 T-Hangar D
The GSF of this building is 17,200 sf.
The building was constructed in 1986.
This building is in average condition.

0978 Med Flight Hangar
The GSF of this building is 42,200 sf.
The building was constructed in 1972.
This building is in good condition.

0993 Airport Blue Barn
The GSF of this building is 900 sf.
The building was constructed in 1965.
This building is in poor condition.

1000 Airport North Storage Hangar
The GSF of this building is 4,000 sf.
The building was constructed in 1976.
This building is in poor condition.

1001 Airport North Storage Shed
The GSF of this building is 600 sf.
The building was constructed in 1980.
This building is in poor condition.

1014 T-Hangar B
The GSF of this building is 17,200 sf.
The building was constructed in 2017.
This building is in excellent condition.

1015 T-Hangar E
The GSF of this building is 19,600 sf.
The building was constructed in 2017.
This building is in excellent condition.

1016 T-Hangar F
The GSF of this building is 19,600 sf.
The building was constructed in 2017.
This building is in excellent condition.

1017 T-Hangar G
The GSF of this building is 17,200 sf.
The building was constructed in 2017.
This building is in excellent condition.

# New Airport Terminal Building
The GSF of this building is 29,000 sf.
The building was constructed in 2018.
This building is in excellent condition.

0021 Airport Administration Building
was not reviewed - in the process of being replaced and will be demolished
0285 Fire Crash and Rescue Building has been demolished

0031 Airport Operations has been demolished
C.3 Building 0143 – The Paint House

C.3.1 Introduction

The Paint House is located at 2160 West Case Road in Columbus, Ohio. The area of the building is approximately 1,100 sf. The building was constructed in 1948. This building is a wood framed, gabled roof structure with a standing seam metal panel wall system and a standing seam metal roof system. The structure has a small Office and a small Storage Room on the interior of the building. The siding and roof systems are rusting, and paint finishes have peeled and are damaged. The interior Office and Storage Room are heavily used and show signs of wear. There are three manual overhead sectional garage doors which appear to be in fair condition. The building needs to be repainted and also needs new HVAC systems. There is a small Guard Station located in the fenced area of the property. This station has some mechanical systems for the large fuel pumps. The guard station itself is in fair condition, but does show signs of wear from its age and use. The clear floor height for the building is 10'-0" to the center. The eave height is 9'-0". The main building is in poor condition.

C.3.2 Exterior

Walls

The exterior walls consist of a standing seam metal wall panel system which are supported by a wood structural frame and girts on the interior of the building. The exterior paint is chipped and damaged and should be stripped and repainted. The siding is rusted and damaged and needs to be repaired in multiple locations.

Roof

The roof of the structure is standing seam metal roof system. The roof is original to the structure; however, it is rusting in various locations and should be replaced if any significant improvements are made to the building.

Outdoor Amenities

There are six large Convault fuel tanks with a pumping station located in the fenced area of the property. These appear to be in good working condition.
C.3.3 Foundation and Structure

The building consists of a reinforced concrete footing with CMU foundation walls to grade. The concrete slab is slab on grade. The footings and foundation appear to be in good condition.

The structural frame consists of a wood post and beam construction with wood roof trusses and a wood purlin and girt wall system. The interior partition walls are wood frame construction. The structure appears in sound condition.

C.3.4 Interiors

Walls

The interior walls of the building are exposed exterior metal wall system and wood girts. Various areas of the wall system have been painted; however, the paint is peeling and in need of repair. There are wood framed walls with painted gypsum board and plywood. Insulation has been added to the interior of the building. However, it is damaged in many locations and should be repaired or replaced. The gypsum board is damaged in many locations and should be patched, repaired, and repainted. The small Guard Station consists of plywood interior walls, which are painted. These appear to be in adequate condition but could be repainted if other work is undertaken.

Floors

The building consists of reinforced concrete slab on grade floors. The floors are worn and stained in various locations but are still in good working condition.

Ceilings

The building has gypsum wall board installed over the wood framing. The wall board is unfinished in many locations and weathered but remains in fair condition. The painted wallboard in the small office appears to be in good condition.

Doors and Windows

The doors consist of hollow metal steel doors and frames. Some of the exterior doors are rusted and should be replaced. Some of the doors have small windows or vision lights. The doors have cylinder hardware. There are sliding steel doors with a window to the Guard Station. There are three overhead sectional doors which are in fair condition but may be at the end of their useful life.

The windows are single pane glass with wire mesh and aluminum frames. The windows are not energy efficient and are original to the building. The Guard Station has double pane fixed windows on one side of the building.

C.3.5 Code Analysis

The structure has multiple means of egress which meet the Life Safety Codes. The exterior doors are accessible, but do not meet ADA Accessibility Compliance. The signage on the building is not compliant with ADA Requirements.

This building does not meet current Energy Code Requirements. The building does not meet the current energy code for R values for insulation, roof, or wall assembly components.
C.3.6 Systems

Fire Protection

Sprinkler
The structure has no sprinkler system.

Fire Alarm
The structure has no fire alarm system.

Extinguishers
The structure has numerous fire extinguishers which appear to receive annual inspection.

HVAC

System
The system consists of an AC unit with DX cooling and electric heat in the Office Area. These systems should be replaced if any significant improvements are made to this building.

Controls
The units themselves have built-in thermostats which appear to be working. However, they are not efficient as temperature ranges fluctuate to the extremes.

Electrical

Lighting
There are surface mounted, and chain hung fluorescent fixtures and some HID exterior lighting. These lights are inefficient and should be updated.

Exit signs and emergency egress lighting are lacking at this facility. These should be installed immediately for compliance with life safety requirements.

Lighting Controls
Manual light wall switches appear to be in adequate condition. Face plates should be replaced as desired.

Service and Distribution

There is currently a 100-amp, 208-volt service. All buildings appear to have service provided by AEP. The fuel pumps are powered by 400-amp 280-volt three phase service. These services appear to be in good condition. Distribution is handled by a single panel in the office of the building. The fuel pumps have two 200-amp distribution panels which appear to be in good condition.

Telecommunications and IT

The building and Guard Station appear to have adequate phone and data access; however, it is limited in its quantity.

Receptacles
There appear to be wall receptacles located in various locations and appear to be in working condition. Outlet covers should be replaced as desired.
C.4  Building 0164 – Snow Removal Equipment Storage

C.4.1  Introduction

The Snow Removal and Equipment Storage Building is located at 1892 West Case Road in Columbus, Ohio. The approximate area of the building is 15,700 s.f. The building was constructed in 1991. The building is a two-story structure with a partial basement that is utilized for truck maintenance and storage of parts. The first-floor main level consists of maintenance and storage facilities, salt and sand bays, offices, and storage rooms. The second floor consists of offices and store rooms. The structure span varies across the building with the largest span being 46’. The clear floor height for the main bay areas is 20’-0” with the second-floor clear floor height being 10’-0” and the partial basement having a clear floor height of 9’-0”. The clear floor height in the center is 29’-0”. The construction type of the building is a steel framed metal building with standing seam metal panel wall system and standing seam metal roof. There are CMU block walls for the offices and storage facilities. The interior surfaces are painted gypsum board and painted CMU walls with VCT flooring and acoustical ceiling systems. There are reinforced concrete walls provided in the sand and salt bays. The facility is in average condition, however, there are areas that need to be improved, as noted in the information below.

C.4.2  Exterior

Walls

The exterior walls are standing seam metal panel system supported on steel girts. The exterior walls have fabric covered batt insulation installed on the interior of the building. Most of the insulation is in good condition, however, there are areas that are damaged that need to be repaired or replaced. The exterior walls do have damage around the exterior of the building and should be repaired. The exterior of the building should be repainted, if any significant improvements are conducted on this building.
Roof
The roof consists of a standing seam metal roof system supported on the steel purlins and roof trusses. The metal flashing and trim is in fair condition, but there are some areas that are damaged and should be repaired. There is insulation located above the ceilings in many of the heated areas. The roof appears to be in fair condition.

The roof drainage system consists of aluminum gutters and downspouts. The downspouts are rusting and damaged at multiple locations, especially at the PVC downspout boots. These connections should be repaired.

Amenities
The exterior of the building does have chain link fence provided on three of the main sides of the building. The fence appears to be in good condition.

C.4.3 Structure
Foundation
The foundations and footings for this building are reinforced concrete footings with CMU block walls to grade. There are reinforced concrete piers around the perimeter at column locations. The slab is a reinforced concrete floor. Both the foundations, footings, and slab appear to be in good condition. There is some general cracking occurring in the bay areas, but these do not appear to be settling or creating any hazardous conditions. The basement walls consist of concrete masonry walls. The basement floor is a reinforced concrete floor. The ceiling of the basement area has a small section that is open to the main level bay as a pit for maintenance purposes. These structural elements are in good condition.

Structural Frame
The structure consists of steel columns, beams, floor joists, steel trusses, and steel girts and purlins for the roof structure. There are reinforced concrete walls located at the sand and salt bays. These components appear to be in good condition.

C.4.4 Interiors
Walls
The interior walls of the facility consist of painted CMU block walls, painted gypsum board in office and Restroom locations. There is exposed insulation on the exterior walls which have some damage that should be repaired. The interior walls are in good condition, but many of them need repainting. The concrete reinforced walls in the salt and sand bays are in good condition. The salt bay has an epoxy coating on the concrete walls to protect it from deterioration from the salt being stored in this area. The first and second floor Restrooms have tile. The first floor Restroom has painted drywall above the tile. The second floor Restroom has a shower that has tile walls.

Floors
The structure consists of reinforced concrete floors which have been sealed in many areas. Other locations have been covered with VCT, such as in the offices and common spaces. The VCT is a high maintenance item and should be replaced if any improvements are made to this facility. The first floor Restroom has ceramic tile floors. These appear to be in good condition, however, there are some locations where grout joints should be cleaned or repaired.

Ceilings
The building consists of exposed painted structure in the bays and other storage locations, however, there are acoustical ceiling systems in the offices and Restroom facilities. There are also some locations that have painted
gypsum board ceilings. Most of the ceilings are in fair condition, however, the acoustical ceiling tile should be replaced, especially in the second floor Restroom above the shower where water damage has occurred.

**Doors and Windows**

Regarding doors, there are multi-track, double-sliding, metal, hanging doors which are provided on two sides of the building for access to the main bays. These have insulated metal panels and appear to be in good condition. There are some areas on the doors that do have damage to them, which should be repaired. The doors should also be resealed, as many of the seals are broken or worn out. Many of the other doors around the facility consist of hollow metal frames and doors. Some have half-light glazing in them. Many of them have lever hardware and appear to be in working condition. Most of the exterior main doors should have weather stripping and cosmetic damage repaired. The windows on the building consist of double pane, glazed aluminum windows. The windows in many locations are fogged up. Regardless, it appears that they are in fair condition currently. If any significant improvements are made to the facility, the windows should be replaced for more cost effective and energy efficient solutions.

**C.4.5 Vertical Circulation**

**Stairs and Elevator**

There is no elevator in this building.

There are two stairways in the building. One consists of steel stringers with non-slip metal steps. The stair has steel tube handrails with baluster railings. This goes from the main level to the second floor. The steel stringers and handrails could be repainted if desired. There is a second set of stairs that go from the main level to the basement area, which consist of concrete steps. This stair also has steel tube handrails that appear to be in good condition. The handrails could be repainted if desired. There is a removable steel ladder that is available from the maintenance pit in the basement to the main level bay. This appears to be in good condition.

**Fixed Casework**

The Breakroom consists of laminated wall cabinets, base cabinets, and counter tops. The second floor Locker Rooms have metal wall lockers. The second floor Restrooms also have laminate vanities where the sinks are located. These are all in fair condition. The Restrooms do have metal partitions, which are stained, but are in good condition. The shower stalls have glass doors which are in fair condition. The main bay has a post lift. There are two safes located in the main level for various items.

**C.4.6 Code Analysis**

The building has multiple means of egress which meet life safety codes. The roof appears to have adequate fall protection. The Restrooms on the first and second floors are not ADA compliant. The first floor also does not have ADA compliant hardware, which should be replaced since it is labeled as an ADA compliant Restroom. The signage for the building is accessible and meets ADA compliance at the proper locations. The exterior doors around the building are not ADA compliant. There is an ADA compliant automatic opener at the main entry to the facility. The handrails do not meet building code for handrail extensions.

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.
C.4.7 Systems

Plumbing

Service
The structure has a 1 ½” water supply with meter.

Piping
The piping for the building consists of copper piping and fittings for the domestic water, which appear to be in good condition. The sanitary piping is PVC pipe which drains to a septic treatment tank with an outfall. The building has a 1 ½” gas service and gas meter which has a 1 ½” supply for distribution into the building appliances. The system appears to be in good working condition.

Fixtures
Fixtures consist of floor mounted water closets and wall mounted urinals. Lavatories are provided in the vanities in the Restroom areas. There are single shower stalls which consist of ceramic tile surrounds. The Breakroom has a stainless steel sink and there is a stainless steel laundry sink and cast iron sink. The main bay does have an emergency shower and eyewash station. The building has wall mounted water fountains located on the first and second floors, which meet plumbing code. However, these fountains do not meet ADA compliance for clear floor space or high-low consistency.

Gas
There is gas provided for the building. It appears to be in fair condition.

Fire Protection

Sprinkler
The Chemical Storage Room has a limited area sprinkler provided from the domestic water system. However, the remaining portion of the building is not sprinkled.

Fire Alarm
The building has a Simplex Fire Alarm System. There are also smoke detectors, pull stations at various exits, and horn strobes provided. The system appears to receive annual inspections.

Extinguishers
There are wall mounted fire extinguishers throughout the building. They appear to receive annual inspections.

HVAC

System
The system consists of gas fired furnaces and a DX cooling condenser and coils. There are also gas fired infrared radiant ceiling heaters and unit heaters provided in the bay areas and other storage rooms. These systems appear to be in working order, although, some of the radiant heater components appear to be damaged and should be repaired.

Distribution
Distribution consists of standard metal duct supply/return. There are exhausts provided in the Restroom and Breakroom area. There are also lay-in diffusers, both supply and return grills in the office areas.
Controls

The building has electronic thermostats which control the HVAC systems. These appear to be in working condition, but there does appear to be a varying temperature range within the building.

Electrical

Lighting

The building has surface mounted and chain hung fluorescent fixtures. There are also HID wall packs and metal halide lighting. Many of the lights are burned out and should be replaced.

Lighting Controls

The lighting controls for the building consist of wall mounted light switches throughout. The cover plates could be replaced if desired. There are also relay panels that control lighting in the bay areas for multi-level switching. These appear to be in adequate condition.

Service and Distribution

The existing service for the building is an 800-amp 208/120 three phase. There is a 225 KVA transformer. The building distribution consists of multiple panels. The electrical meter is box is rusting and should be repaired or replaced.

Telecommunications and IT

There appears to be telephone and computer access throughout the office areas of the building. Additional outlets could be provided if any improvements are made to the facility.

Security Systems

The security for the building is limited and consists of only a few card access controlled doors. The access control appears to be in working condition.

Receptacles

There appear to be multiple receptacles located throughout the building. Additional outlets could be added if any improvements are made to the facility.

Exit Signs and Emergency Lighting

The building has illuminated exit signs and wall mounted emergency lighting. Both of these have battery back-ups and they appear to be located throughout the facility. They also appear to be in working condition.
C.5 Building 0195 – Airport Storage

C.5.1 Introduction

The Airport Storage Building is located at 2160 West Case Road, Columbus, Ohio. The building is approximately 12,800 s.f. The building was constructed in 1960 and was originally called T-Hangar B. It was recently changed to Airport Storage. The clear floor height for the building is 16’-0”. The spans vary, with the largest span being approximately 42’-4”. The building is a steel frame structure with gable roof. The building has steel siding and roof system. The structure consists of steel post beams and steel roof trusses. There are large sliding style steel doors on the exterior of the building on the east and west elevations. The exterior façade is rusted and is in poor condition. Many of these panels will need to be replaced in their entirety. The building is currently being used for storage. There are multiple interior systems and walls that have been abandoned and damaged due to storage of materials. Many of the sliding doors are difficult to operate and have been damaged by vehicle impact. The building is in poor condition.

C.5.2 Exterior

Walls

The exterior walls are painted metal siding. The siding is rusted throughout, and the paint finish is fading. Many of the panels should be replaced in their entirety. Many of the panels are damaged and would need to be repaired if not replaced. The entire exterior façade should be repainted.

Roof

The roof consists of a metal standing seam roof system, which is supported by the trusses and purlins. In review of the facility, there is limited insulation for the roof. Many of the panels on the roof appear to be rusted through, from visible inspection from inside the building. The roof would need to be replaced in its entirety.

Roof drainage consists of steel gutters and downspouts which drain to cast iron boots. Many of the gutters and downspouts have either rusted or are damaged where they are no longer functional. Gutters and downspouts should be replaced.

Condition: Poor
C.5.3 Structure

Foundation

Footings appear to be continuous concrete footings. The floor is a concrete slab on grade. These appear to be in adequate condition.

Structural Frame

The structural frame consists of steel columns, beams with roof trusses, steel girts, and roof purlin systems. The structural integrity is provided, however, the exterior cladding for the walls and roof is in poor condition.

C.5.4 Interiors

Walls

Interior partition walls that are still in place have severe damage and many of the wall coverings have been removed. Perimeter walls are just exposed structural systems and metal siding. There are some walls with fiber board insulation, however, it is severely damaged and saturated with water. The metal siding has rusted through in many locations.

Floors

Many of the areas within the building have asphalt paved floors. There are some areas that have a concrete slab on grade, specifically, in the old office areas. Many of the floors are in bad condition and need to be replaced.

Ceilings

The ceilings are exposed steel with exposed insulation. Much of the insulation has either fallen down or is missing entirely.

Doors and Windows

The exterior consists of steel sliding doors on steel tracks. Many of the sliding doors are in poor condition. They are either difficult to open, rusted, or have been damaged by vehicle impact. These doors need to be repaired or replaced. There are some single-entry doors that are hollow metal frames and doors. These appear to be in fair condition. The hardware on these doors is not in good condition and should be replaced.

There are minimal windows in this building. The ones in place are steel frame, single pane windows with wire mesh. These windows appear to be original to the building and are in poor condition.

C.5.5 Code Analysis

The doors on the exterior of the building are not ADA compliant. Hardware on the single man doors need to be replaced. Current hardware is not ADA compliant. The structure does have multiple means of egress, and therefore meets the Building Code. It should be noted, though, that many of the doors are difficult to operate, which would need to be fixed for life safety requirements.

The building does not meet the current energy code for R values for insulation or for roof or wall assembly components.
C.5.6 Systems

Fire Protection

Sprinkler
There is no sprinkler system in the building.

Fire Alarm
There is a fire alarm with heat detectors and a pull station at the northeast corner of the building. There are no interior systems in place as they have been removed.

Extinguishers
There are fire extinguishers located around the building which appear to receive annual inspection.

HVAC

System
Systems were abandoned in place.

Electrical

Lighting
Fluorescent lighting in the building has been abandoned in place and is not in working order. Exit signs and emergency egress lighting are not provided and should be installed immediately for life safety requirements.

Lighting Controls
Wall mounted switches are abandoned in place and not operational since lighting has been abandoned.

Service and Distribution
The building has a 100-amp 240/120 service, which appears to be adequate for this building. Distribution was handled by one distribution panel.

Telecommunications and IT
There is telephone coverage for the building due to the fire alarm, however, there is not adequate data services for the building.

Receptacles
Most of the receptacles have been removed, therefore, there is no adequate provision for electrical.
C.6 Building 0196 – T-Hangar A West

C.6.1 Introduction

T-Hangar A West is located at 2160 West Case Road in Columbus, Ohio. The approximate size of the building is 10,600 s.f. The building was built in 1960. The building is a steel structure with a gabled roof consisting of steel posts and beams and steel roof trusses. The longest span is 32’-4”. The clear floor height is 16’-0” at the center. The clear floor height at the hangar doors is 8’-0”. The clear floor height at the eave is 12’-0”.

The wall and roof systems have chipped and peeling paint. Some of the panels have begun to rust, specifically on the roof. There is a small portion of the existing hangar that was converted to the new Flyers Club Offices. This area has broad loom carpet over concrete floors and some VCT floors. This area has stud wall partitions and painted gypsum board. There is a small room on the other side of the building used for tire storage. There are nine hangar bays which are rented and hold aircraft and some personal property. The structure is old but is in average condition.

The Hangar Doors are 35’-5” x 8’-0”

The following is a list of aircraft that were housed in the hangar at the time of the assessment.

- A1 - N32405
- A2 - N5005U
- A3 - N739EU
- A4 - N510SU
- A5 - Empty
- A6 - N761AM
- A7 - Empty
- A8 - N91WW
- A9 - N566FD

C.6.2 Exterior

Walls

Exterior walls are painted metal siding. The paint finish is peeling and damaged in many areas and should be repainted. The southernmost hangar does have a standing seam metal panel system installed that is in good condition.
Roof
The roof is a metal standing seam roof system supported on the roof purlins and trusses. There are translucent panels that have been installed. There are areas where rust has occurred due to paint peeling or chipping. These panels should be replaced. Metal gutters and downspouts drain to cast iron boots. The gutters and downspouts are in fair condition, however, there are a few that are damaged that should be repaired.

C.6.3 Structure
Foundation
Footings appear to be continuous concrete footings. The floor is a concrete slab on grade. These appear to be in adequate condition.

Structural Frame
The structural frame consists of steel columns, beams with roof trusses, steel girts, and roof purlin systems. The integrity of the structural frame is in place, though the exterior cladding for the walls and roof are in poor condition.

C.6.4 Interiors
Walls
The southernmost hangar was converted to the new Flyers Club which consists of stud frame partition walls with painted gypsum board. The walls could stand to be repainted due to some cosmetic damage. The hangar spaces around the remaining portion of the building have exposed metal siding. These areas appear to be in good condition.

Floors
The southern hangar where the new Flyers Club is located has a concrete floor. It is covered with broad loom carpeting and VCT flooring which is worn out and should be replaced. Hangar spaces consist of asphalt paving, many of them appear to be in adequate condition.

Ceilings
The new Flyers Club has painted gypsum board ceilings and some acoustical ceiling systems which appear to be in good condition. Ceiling tiles could be replaced if desired to improve cosmetic appearance. The hangars are exposed structure which is painted and appears to be in good condition.

Doors and Windows
There are hollow metal doors and hollow metal frames at the new Flyers Club area. These appear to be in fair condition, but there are also steel sliding doors on metal tracks around the perimeter of the building. Many of the single and double entry hollow metal doors have cylinder hardware. The Storage Area door has chipped and peeled paint which should be repainted. On the sliding metal doors, the metal tracks appear to be in good condition. There are a few that are damaged which should be repaired. There are door guards which need repair. Pad locks on the sliding doors should be oiled or replaced where needed.

Windows in the facility are steel, single pane windows. The new Flyers Club has double hung, single pane windows and aluminum frames. These are in good condition, but all windows should be replaced if any improvements are done to this facility.
C.6.5 Code Analysis

The steel sliding doors are not ADA compliant. Many of the entry doors around the facility are also not ADA compliant, especially into the new Flyers Club. The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.6.6 Systems

Fire Protection

Sprinkler

There is no sprinkler system in the building.

Fire Alarm

There are heat detectors and a fire alarm in the hangar bays with a pull station at the northeast corner of the building. These appear to be tested annually.

Extinguishers

The portable fire extinguishers that are provided, appear to be tested annually.

HVAC

System

The HVAC consists of electric heat pumps for the new Flyers Club. This heat pump also has an air handling unit with DX coils. There is also a 1-ton window AC unit that is provided.

Distribution

The distribution system utilizes standard flex supply and return ducts and standard diffusers and grills. These appear to be in good working condition.

Controls

Building controls consist of electric thermostats which control the heat pump and the window unit and they appear to be in good working order.

Electrical

Lighting

The building has surface mounted and chain hung incandescent and HID lighting. There are also fluorescent fixtures provided in some locations. All this lighting should be replaced with current lighting technology such as LED or compact fluorescent fixtures. The lighting is in adequate condition for the general use of the building, but if any improvements are undertaken, the lighting should be replaced.

Lighting Controls

Wall mounted light switches are provided which appear to be in good condition.

Service and Distribution

There is a 200-amp 240/120 service with distribution through one panel.
Telecommunications and IT

There appear to be adequate telephone provisions for fire alarm, though there are no IT provisions in the building except in the new Flyers Club. It appears to be limited and should be expanded if any further improvements are made to this facility.

Receptacles

There are general receptacles provided around the facility, including ground fault current interrupters (GFCI).

Exit Signs and Emergency Egress

Exit signs and emergency lighting is lacking at this facility and should be installed immediately for life safety requirements.
C.7  Building 0197 – T-Hangar A East

C.7.1  Introduction

0197 T Hangar A East is located at 2160 West Case Road in Columbus, Ohio. The approximate size of the building is 12,800 s.f. The building was built in 1960. The building is a steel structure with a gabled roof consisting of steel posts and beams and steel roof trusses.

The exterior has been painted several times over the course of its life. Paint is chipping and peeling around the entire building. The building should be stripped and repainted.

There are 10 active hangars available for rent. There is a small rentable space with carpet that is severely worn. This rental space is conditioned. There is a light vault located in the building for the air strip. The lighting equipment for the entire Airport Complex is located here. There is also an electric generator located in this room. The unit is only servicing the lighting. The facility is in poor condition. The clear floor height is 14'-0" at the center. The clear floor height at the hangar doors is 8'-0". The clear floor height at the eave is 12'-0".

The Hangar Doors are 35'-5" x 8'-0"

The following is a list of aircraft that were housed in the hangar at the time of the assessment.

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<thead>
<tr>
<th>Aircraft</th>
<th>Registration Number</th>
</tr>
</thead>
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</tr>
<tr>
<td>A19</td>
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</tbody>
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C.7.2  Exterior

Walls

The exterior walls are painted metal siding. Much of the paint around the facility is chipping and peeling and should be stripped and repainted. Some of the panels are rusting and need to be replaced.
Roof

The roof is a metal standing seam roof system supported on the roof purlins and trusses. There are translucent panels that have been installed. There are areas where rust has occurred due to paint peeling or chipping away. These panels should be replaced. Metal gutters and downspouts are in place which drain to cast iron boots. The gutters and downspouts are rusting and should be repaired. A few of the downspouts do not connect to the boots due to missing portions of the downspout or due to the connection being damaged. These need repair to avoid ponding water at the base of the building and foundation.

Amenities

The Airport lighting equipment for the entire complex is located in this building. This room appears to be in adequate condition, however, there are some items that need to be replaced, such as lighting and ceilings.

C.7.3 Structure

Foundation

The column supports are reinforced concrete footings with concrete piers. There is a reinforced slab on grade floor on the north and south ends of the building for the rentable space and Equipment Room.

Structural Frame

The steel frame consists of steel posts, columns and beams, steel roof trusses, and steel girts and purlin systems. This structure appears to be in good condition, and its integrity is intact.

C.7.4 Interiors

Walls

The rentable space and Equipment Room have stud framed walls with painted gypsum board. These walls are in fair condition; however, they could be repainted if desired. Vinyl base has been removed from the rentable space and many of the walls in this area are damaged and should be patched, repaired, and repainted. New base should be installed as well, prior to renting the room. The hangar bays consist of exposed metal siding systems. Some of them are rusted and could be cleaned and painted with a rust inhibiting paint.

Floors

The building consists primarily of concrete floors. The rentable space does have broadloom carpeting which is extremely worn and should be replaced. The hangar bays consist of asphalt paving, which is damaged or cracking in many locations and is also stained from jet fuel, oil, and hydraulic fluid. The bays are functional, but repairs to the floors should be considered.

Ceilings

The bays consist of exposed steel structure. There is rust that is occurring, and these patches could be painted with a rust inhibiting paint to avoid further deterioration. The Equipment Room and rentable space have acoustical ceilings. Many of them are stained and should be replaced. There are also many that are falling out in the rentable space that should be repaired.

Doors and Windows

Many of the exterior doors to the light vault and to the rentable space are not ADA compliant. The steel sliding doors on steel tracks are not ADA compliant either.
Exterior doors consist of double steel sliding doors on steel tracks. The hardware should be replaced. There are also single steel entry doors to the light vault and to the rentable space. The single-entry doors have glazing in them which appears to be in good condition. The doors themselves have been painted, but the paint is chipping and peeling. These should be stripped and repainted. Many of the sliding doors are difficult to open. These tracks should be repaired.

Exterior window frames consist of steel, single pane windows with wire mesh. The windows appear to be original to the structure and are in poor condition. The windows should be replaced if any improvements are made to the facility.

C.7.5 Code Analysis

The building has multiple means of egress which meets current life safety requirements.

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.7.6 Systems

Fire Protection

Sprinkler

There is no sprinkler system for this building.

Fire Alarm

The fire alarm system has pull stations and heat detectors in the hangars along with warning lights and sirens. These appear to be tested annually.

Extinguishers

Portable fire extinguishers are provided throughout and appear to be tested annually.

HVAC

There is an AC window unit with electric heat in the tenant space. It appears to be in working condition.

Controls

The window unit has a built-in thermostat which appears to be in working condition.

Electrical

Lighting

The structure consists primarily of surface mounted chain hung HID and incandescent lighting. The office or rentable space has fluorescent fixtures. All lighting should be replaced with new lighting technology such as LED or compact fluorescents. Exit signs and emergency egress lighting are lacking in the facility and should be installed to meet life safety requirements.

Lighting Controls

Lighting controls consist of wall mounted light switches which appear to be in working condition. Cover plates could be replaced if desired.
Service and Distribution

Service entrance consists of a 100-amp 240/120-volt service. Distribution is handled by a single distribution panel.

Telecommunications and IT

There appear to be adequate telephone provisions for fire alarm, though there are no IT provisions in the rentable space. It appears to be limited and should be expanded if any further improvements are made to this facility.

Receptacles

There are general receptacles provided around the facility, including ground fault current interrupters (GFCI).

Emergency Power

The light vault does have a Marathon Electric 90 kw 375-amp diesel fuel generator. The diesel fuel tank is located on the exterior of the building, and is a 250-gallon tank. The tank appears to be in good condition. The generator appears to be in good condition. It should be noted that this generator is only for the light vault equipment which is the lighting for the entire Airport Facility.
C.8 Building 0198 – Hangar 4

C.8.1 Introduction

0198 – Hangar 4 is located at 2160 West Case Road, Columbus, Ohio. The area is approximately 29,500 s.f. The building was constructed in 1963 with two additions added in 1979. The structural span varies with the largest span being approximately 118’-0”. The clear floor space at the center is 28’-0”. The tenant spaces have clear floor height of 8’-0”. The clear floor height at the hangar door is 20’-0”. The building structure consists of CMU block walls on the perimeter of the hangar and both additions. The hangar is a steel frame structure with steel columns and beams. The hangar and additions are in poor condition and continue to function as originally intended. The building does have Restrooms with shower stalls, which are in average condition. Several of the tenant spaces within the building have new paint and cabinetry. Hangar 4 has cracks throughout and appears to be settling in many places. It was stated that the floor conditions may be caused by leaks in the heating system that is below grade.

The Hangar Doors are 114’-0” x 20’-0”

The following aircraft and numbers were in the hangar at the time of the assessment.

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4UZ</td>
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<td>N807AD</td>
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</table>

C.8.2 Exterior

Walls

The exterior walls are painted CMU block. These walls should be repainted. The other walls consist of insulated corrugated metal wall panel systems. These systems are painted, but are chipping and peeling around the facility. These areas should be stripped and repainted.
Roof
The roof is an insulated corrugated metal roof system. The roof drainage consists of steel gutters and downspouts. There are downspouts that go to cast iron boots. These appear to be in good condition.

C.8.3 Structure
Foundation
The structure has continuous reinforced concrete footings with CMU block foundation walls. These appear to be in good condition. Concrete slabs are slab on grade. The Office Spaces appear to be in good condition, though the hangar floor has radiant heating installed which appears to be causing issues where there is heavy cracking and settling of the floor. The bay floor should be repaired.

Structural Frame
The structural frame consists of a steel structure with steel columns, roof trusses, and steel girts and purlin system. CMU block perimeter walls support steel roof trusses. The structure appears to be in good condition and integrity is intact.

C.8.4 Interiors
Walls
The hangar area has exposed metal siding systems with insulation. The insulation is damaged or missing in multiple areas and should be repaired or replaced. The metal siding systems that are exposed are painted. The paint itself is faded and should be repainted if desired. The painted CMU block perimeter and partition walls are in adequate condition but should be repainted if desired. The tenant service spaces are metal stud framed walls with painted gypsum board. There are wall coverings such as wall paper and wood paneling. Many of these wall coverings are in poor condition and should be removed and replaced with new painted finishes.

Floors
The hangar floor is a reinforced concrete slab on grade with radiant heating. It also has an epoxy floor covering. As noted previously, the floor is cracking and settling in multiple locations. This should be immediately repaired to avoid safety hazards or damage to the aircraft. The other areas, specifically, the office areas, have carpeting, both broadloom and carpet squares. There is ceramic tile, VCT, and epoxy coated concrete. All floor coverings in these areas are in poor condition and should be replaced.

Ceilings
Ceilings consist of exposed steel roof systems and insulation. This occurs in the hangar area. Insulation is damaged or missing in multiple locations and should be repaired or replaced. The tenant spaces consist of acoustical ceiling systems and some painted gypsum board. These ceiling systems are in poor condition and should be replaced. Many of these ceiling systems appear to be damaged due to water infiltration which should be reviewed and repaired.

Doors and Windows
Windows consist of single pane aluminum windows. Many of the windows are difficult to operate and allow air infiltration. These are in poor condition and should be replaced.

The doors consist of single and double hollow metal entry doors and frames. These doors have cylinder hardware. There are sliding metal hangar doors with translucent panels. The folding hangar door also has translucent panels. These doors are in fair condition but are probably at the end of their useful life. The office areas have hollow metal
doors and frames with vision lights. Many of the offices have cylinder or lever hardware. There are sliding wood doors on steel tracks for storage closets that are within the hangar area. Most of the doors throughout need to be repainted. There are some doors that have damage that should be repaired. The large folding doors are 114’-0” x 20’-0”.

Fixed Casework

Many of the offices have wood base and wall cabinets with laminate countertops in the Kitchenette areas. These are in fair condition.

C.8.5 Code Analysis

There are multiple means of egress from the structure, which meets building code requirements. There are Restrooms located in the building in the tenant suites, however, these are not ADA accessible. ADA signage is lacking throughout and should be installed. The exterior doors are not ADA compliant. The sliding entry doors have steel entry doors built into them which are on steel tracks and have automatic openers. These entrances are accessible, but not in full compliance with ADA Accessibility.

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.8.6 Systems

Plumbing

Service

The service is a 4” water supply and water meter.

Piping

Piping consists of insulated copper piping which appears to be in good condition. There is water damage apparent in some of the tenant suites which should be investigated and repaired. The sanitary piping consists of cast iron piping with drains which go to a sewage treatment vault. The hangar area has floor drains which drain to an oil and sand separation trap.

There is a gas fired 30-gallon water heater provided for the building. This unit appears to be at the end of its useful life.

Fixtures

The fixtures are floor mounted water closets, sink vanities, and shower units. These appear to be in good condition.

Gas

The structure has a 1” steel gas pipe. It appears to be in good condition.

Fire Protection

Sprinkler

There is no sprinkler system in this building.

Fire Alarm

The building has a fire alarm system with heat and smoke detectors and pull stations at exits, along with lights and horns. It appears the system is tested annually.
Extinguishers
The building has portable fire extinguishers located throughout which appear to be tested annually.

HVAC
System
The system is a gas fired hot water boiler and circulating pumps. There are baseboard unit heaters and under floor heating pipes. The boiler appears to be at the end of its useful life. Due to the possibility of the radiant floor heating leaking under the slab, the radiant floor heating should be replaced when the slab is replaced. There is some electric heating that has been added to tenant space Restrooms. There are numerous through-wall AC units that do also have heating capabilities for some of the tenant spaces. These appear to be in working condition.

Distribution
The distribution system consists of standard metal duct supply and return. Restrooms have exhaust fans. There are lay-in diffusers, as well as supply and return air grills that are located in many of the tenant spaces. There are area exhaust fans which are connected to outside air louvers as well.

The boiler system has steel welded piping for distribution of hot water supply and return piping that has insulation. Some of the insulation is missing in locations and should be replaced. Some of this piping appears to be worn and at the end of its useful life and should be replaced.

Controls
There are electric thermostats throughout that appear to be in working condition.

Electrical
Lighting
There are new fluorescent light fixtures in the hangar area. There are also lay in and chain hung fluorescent fixtures and HID fixtures in some of the tenant spaces. Some of the tenant spaces also have incandescent lighting provided. Many of these older fluorescent and incandescent and HID lights should be replaced with newer lighting technology such as compact fluorescents or LED lights.

Lighting Controls
Lighting controls consist of mostly wall mounted light switches. There are motion sensors provided in some locations.

Exit Signs and Emergency Egress Lighting
There are exit signs, emergency egress lighting with battery back-ups and combination units with battery back-ups. These all appear to be in good condition. There are some older exit signs which should be replaced.

Service and Distribution
The building has a 600-amp 208/120 service. The distribution for the building is spread through switch gear power distribution panels and then separate tenant meters in each of the tenant spaces.

Telecommunications and IT
There is adequate telephone and computer access provided in the building per the current arrangement. If any modifications are made to this facility, additional outlets should be provided.
Security Systems
There are exterior cameras around the property which are monitored locally. There are also some keypad locks at various doors around the perimeter of the building.

Receptacles
There appears to be adequate receptacles throughout the facility, including GFCI outlets. There are some larger amperage receptacles located in the hangar. Additional outlets should be provided if any significant improvements are made to this facility.
C.9 Building 0235 – Flight Laboratory

C.9.1 Introduction

The Flight Laboratory is located at 2160 West Case Road, Columbus, Ohio. The approximate area is 13,500 s.f. The building was constructed in 1958 with the last renovation occurring in 1973. The building was made the Flight Laboratory in 1974. This building is a one-story building. The building itself contains offices, aircraft storage, and maintenance facilities. The office and lab portion of the structure is a CMU block building with brick veneer on the west elevation. The structure consists of bow string trusses, exterior CMU block. There is a portion of the Mechanical Room that is below grade, which the boiler system was replaced with a hot water system in 2015. The building has two flight simulation simulators. There are acoustical panels which have been added for sound control. The majority of the building is outdated, and finishes are in worn condition. The building is in average condition for its age; however, many of the systems that have not been previously replaced are approaching the end of their useful life. Many of the finishes within the building need to be updated. The structural span varies across the building with the largest span being 96’-6” at the hangar area. The clear floor height is 15’-0” at the eave with the clear height at the hangar doors at 16’-4”. The office areas are 8’-0”.

The Hangar doors are 96’-8” x 16’-4”

The following aircraft and numbers were in the hangar at the time of the assessment.

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<thead>
<tr>
<th>Aircraft</th>
<th>Number</th>
</tr>
</thead>
<tbody>
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C.9.2 Exterior Walls

The exterior walls are CMU block with brick veneer along the west elevation. The block walls are painted. The exterior walls are in fair condition but should be repainted. The north and south portions of the hangar area have
metal wall panel systems. These also appear to be in fair condition but could be repainted if other improvements are made.

**Roof**
A portion of the structure has a flat roof, which has been recently replaced and is in good condition. It consists of a TPO fully adhered roof system and new flashing. This roof is in good condition. The hangar area has a metal roof system and a built-up roof membrane installed over top of the metal roof panels. It appears that this roof is in fair condition. The roof's drainage system consists of steel gutters and downspouts with cast iron boots. These appear to be in fair condition but could be repainted if other improvements take place.

**C.9.3 Structure**

**Foundation**
The structure consists of continuous reinforced concrete footers and concrete piers at the column locations. The foundation walls consist of CMU block. There is reinforced concrete slab on grade for floors. These appear to be in good condition. There is a Mechanical Room that is partially below grade which consists of CMU block walls and a reinforced concrete slab. This room appears to be in good condition.

**Structural Frame**
The structural frame consists of load bearing CMU block walls with steel roof joists and metal deck. The hangar consists of CMU block walls with reinforced block columns supporting both string roof trusses, metal purlin, and a metal purlin system. There is metal roof deck installed on this portion. The structure appears to be in fair condition.

**C.9.4 Interiors**

**Walls**
Interior walls are painted CMU block with vinyl base. The walls appear to be in good condition. The Mechanical Room, which is partially below grade, is painted CMU block walls. These walls have cosmetic damage and stains which should be cleaned. All of the walls should be cleaned and repainted.

**Floors**
The reinforced concrete slab on grade floors have rubber flooring installed in the high traffic areas. The Restroom consists of Terrazzo flooring. The Terrazzo flooring has been stained in multiple locations. There is broadloom carpeting in some of the office areas and hallways. This carpet is rather old, and should be at the very least, cleaned, if not replaced. The Mechanical Room has exposed concrete floors. The mezzanine areas have wood floors which appear to be in fair condition. The hangar area has reinforced concrete flooring of which cracking has appeared throughout, however, there is no substantial settling evident in the cracked areas.

**Ceilings**
Most areas have the old interlocking ceiling tiles. Many of them have been painted. These appear to be similar tiles to the old asbestos ceiling tiles. Further investigation into environmental concerns for asbestos and lead should be conducted by a third party Environmental Firm. This is beyond the scope of this work. These ceilings need to be replaced. There are also acoustical ceiling systems in some of the office areas. Many of them have stained ceiling tiles which should be replaced. The Flight Simulator Room has exposed concrete ceilings and acoustical panels for sound control. These appear to be in good condition. The Restrooms and the Mechanical Room, which is below, grade is exposed painted structure. The hangar area has exposed roof framing and decking which are in fair condition.
Doors and Windows

The building has hollow metal entry doors and frames. Some of them have half glass lights. The doors have cylinder hardware. Most of these doors are in fair condition but could stand to be repainted. The hangar doors are sliding doors on steel tracks, which recess into pockets on the side of the hangar. These are in fair condition, but there is some damage that should be repaired. The Mechanical Room has a hollow metal entry door with cylinder hardware. This door should also be repainted.

The building has single pane steel window frames and glass. The windows are operable. The windows are inefficient and allow significant air infiltration. These windows should be replaced if any improvements are undertaken.

C.9.5 Vertical Circulation

Stairs and Elevator

There is no elevator in this building. The stairways consist of steel stringers and metal steps with steel tube handrails. These stairs go to the mezzanines in the hangar. The mezzanine has steel tube guardrails. There are also cast in place concrete steps that go to the lower level Mechanical Room. These also have steel tube handrails. All of the handrails and guardrails should be stripped and repainted.

Fixed Casework

There are two flight simulators located in the building for training purposes. There are also wood base cabinets with laminate countertops. The Restrooms have metal toilet partitions which are in fair condition. The wood base cabinets and laminate countertops are also provided in the Women's Restroom. There is a large Receptionist desk, along with wood display cabinets. These are outdated, but in good condition.

C.9.5 Code Analysis

The structure has multiple means of egress to meet life safety requirements. There is no roof fall protection provided for the flat roofs. The Restrooms are not ADA compliant, and signage for the building is not ADA compliant. The steel entry doors are not accessible and are not ADA compliant on the exterior of the building.

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.9.6 Systems

Plumbing

Service

The building has a 1 ½” water supply and meter.

Piping

The piping is insulated copper piping for the domestic water, which appears to be in fair condition. The sanitary piping is a cast iron piping with some PVC piping. The piping appears to be in fair condition.

Fixtures

The hot water source is a small electric hot water tank to provide hot water for handwashing in the Restroom Areas. Fixtures include wall mounted water closets and wall mounted lavatories and urinals. Most of these fixtures are older, original to the building in most cases. There is a floor mounted water fountain located in the hallway which does not meet any current building or accessibility codes. The building contains a water softener in the Mechanical
Room. Most of the fixtures appear to be in working order but should be replaced. The flush valves should be replaced.

**Gas**

The gas is a 3” natural gas service with meter.

**Fire Protection**

**Sprinkler**

There is no sprinkler system.

**Fire Alarm**

The building has a Simplex fire alarm panel which appears to be receiving annual inspections.

**Extinguishers**

Portable fire extinguishers are provided throughout the building and in the hangar. These appear to receive annual inspections.

**HVAC**

**System**

There is a natural gas fired heater steam boiler with baseboard unit heaters. The original system was replaced in 2015 with a new hot water system. The hangar consists of ceiling mounted heaters which replaced the original unit heaters. These systems are in fair condition. The structure has two split system AC condensing units.

**Distribution**

The distribution system consists of standard metal return and supply ducts. There are diffusers and grills throughout the facility. The system appears to be in working order. There appears to be some locations where steam piping has been abandoned in place and should be removed.

**Controls**

There are electric thermostats throughout the building which have been updated with the new system.

**Electrical**

**Lighting**

The structure has lay in and chain hung fluorescent lighting fixtures and some HID lighting. The HID lighting should be replaced if any other improvements are undertaken. Fluorescent lighting appears to be in good condition.

**Lighting Controls**

**Exit Signs and Emergency Egress**

The structure has exit signs and emergency egress lights with battery back-ups provided. These appear to be in fair condition.

**Service and Distribution**

The building has a 400-amp 208/120 service. It was reported the building has maxed its capacity. If improvements are undertaken, the service size should be upgraded. Distribution occurs through two distribution panels which are maxed out. These should be upgraded if any other improvements are undertaken when the service is upgraded.
Telecommunications and IT

The structure currently has telephone and computer access coverage. Additional outlets should be installed if improvements are undertaken, however.

Receptacles

There are wall receptacles located throughout the building. The hangar also has larger amperage receptacles. Additional receptacles should be added if there are improvements made to the building.
C.10 Building 0236 – Hangars 1, 2, and 3

C.10.1 Introduction

Hangars 1, 2, and 3 are located at 2160 West Case Road, Columbus, Ohio. The approximate area for Hangars 1, 2, and 3 is 29,400 s.f. The buildings were constructed in 1943, which are all tied together. The building has CMU block perimeter and interior walls with wood barrel trusses. There are interior mezzanines and steel frame supports and posts. The service areas have painted gypsum board ceilings and the engineered mezzanines have added office space to the facilities. There is a Parts Department located in the structure and a paint booth is contained in Hanger 3 with an exhaust system which is manually operated. There is a restaurant tenant in the building which is located on the northeast corner of the building. The restaurant is called Barn Stormers.

These buildings are in average condition and are close to the end of their useful life. Though this is the case they are still being utilized and can continue to be utilized. The structural span varies across the building, with the larger spans being 80’ and 61 ½’. The clear floor heights for the main area are 8’-9” and the mezzanine levels are 8’-0”. The largest clear floor height space for the building is approximately 28’-6” at the center. The clear floor heights at the hangar doors is 18’-0”.

The Hangar doors are as follows:

Hangar 1 = 64’-0” x 18’-0”
Hangar 2 = 46’-0” x 18’-0”
Hangar 3 = 64’-6” x 18’-0”

The following aircraft were being housed in these hangars at the time of the assessment, due to maintenance being conducted.
Hangar 1 had the following aircraft:

N31OVP  N306BZ
N2864F

Hangar 2 had the following aircraft:

N83KS   N22OSS
N3055R

Hangar 3 had the following aircraft:

N456PP  N766OP
N736CT  N1872T
N892WW  N9155Q

The apron area had the following aircraft:

N321W2  N9OSU
N42U    N400HG
N22KV   N824CB
N1008L  N525DR

C.10.2 Exterior

Walls

The exterior walls are load bearing CMU block walls with paint or epoxy finishes. There is painted wood siding on the west end of the hangars. Most of these finishes are damaged or peeling and need to be stripped and repainted. The walls themselves appear to be in fair condition.

Roof

A new roof was installed in approximately 2009, which is a heat welded ballasted roof system. It appears to be in good condition.

The roof drainage system consists of stainless steel gutters and downspouts which were replaced when the roof was replaced in or around 2009. They currently drain the cast iron boots.

C.10.3 Structure

Foundation

The structure has continuous reinforced concrete footers with CMU block walls. The slab is reinforced slab on grade. These are in fair condition; but the concrete slab has various cracks throughout. However, the cracks do not appear to be structurally of any concern as they are not settling or heaving.

Structural Frame

The structural frame consists of load bearing CMU block exterior walls with CMU pilasters supporting the wooden barrel roof trusses and purlin system. These systems appear to be in good condition and structural integrity is intact.
The mezzanines are steel framed with steel support columns. These also appear to be in good condition for the age of the building.

C.10.4 Interiors

Walls

The majority of the walls are CMU block walls which are painted. The walls should be stripped and repainted. There are wood framed walls with painted gypsum board or plywood. These are aged and should be repainted. The mezzanine consists of wood and metal stud framed walls with painted gypsum board. These are in fair condition, but should be repainted. There are various walls that have damage, specifically at the offices. These should be patched, repaired, and repainted.

Floors

The balconies have tongue and groove wood floor. These are in good condition for the age of the building, but should be sanded and re-stained. There are concrete over metal pans in some of the other areas. These floors are in good condition. The hangar floors are reinforced concrete slabs with epoxy coverings. These slabs are cracked; however, they do not appear to be structurally of concern. There are exposed concrete floors in most of the work areas. There is VCT flooring and broadloom carpet, and carpet squares provided in the office and other areas of the building. All of the flooring is worn and outdated and should be replaced. There is a concern that some of the floor tile may contain asbestos which should be inspected by an Environmental Inspection Firm. The clear floor height is 28’-6”.

Ceilings

The hangars have exposed wood framing. There are painted gypsum board ceilings in the mezzanine areas and office areas. There are also acoustical ceiling systems and painted gypsum board in the offices. Most of the ceilings need repair due to water or cosmetic damage. Ceiling tiles should be removed and replaced.

Doors and Windows

There are hollow metal entry doors and frames with lever hardware. Some of these doors have half lights. Many of these are in good condition, though they should be repainted. The hangar doors consist of fiberglass folding hangar doors. These appear to be in good condition, even though there is some cosmetic damage that should be repaired. There are also overhead aluminum sectional doors that are provided which appear to be in good working order. Some of the steel entry doors are in wood frames which are in bad condition and should be replaced. There are interior hollow metal doors and frames. Some of these have half lights. They have cylinder hardware. There are also wood doors with half lights, some in wood and some in metal frames. There are some doors with older panic style hardware which should be replaced with new panic hardware which meets building codes. There are some offices with hollow wood doors with metal frames and cylinder hardware. There is a large fire door located between Hangars 1 and 2. It appears to have received annual inspection. Most of the doors throughout the facility should be stripped and repainted. Some of the older doors do not close correctly and are difficult to operate. These should be replaced.

The windows consist of single pane glazing and steel frames. There are a few aluminum storefront systems with double pane glass that have been installed. It was noted that some of the windows have been recently replaced due to water infiltration that was occurring. Most of the original windows need to be replaced as they are inefficient and allow air infiltration into the building.
C.10.5  Vertical Circulation

Stairs and Elevator

There is no elevator in this building. Hangar 1 has reinforced concrete stringers and steps with steel tube railings. These railings should be stripped and repainted.

Fixed Casework

There are metal wall lockers located throughout the building. There are also a few fenced or caged areas in portions of the building. Many of these need to be cleaned and repainted as they have begun to rust. There are wood base and wall cabinets located throughout the building. There is also a paint booth located in Hangar 3. It does not have any fire suppression, but does appear to have proper exhaust.

C.10.6  Code Analysis

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

There are multiple means of egress from the building which meet life safety requirements. There appears to be roof fall protection provided. The Restroom does not meet ADA compliance. It appears that the Restroom is a Unisex Restroom. Current building codes require a separate Restroom for each sex. There are some women working at this facility, which would require the additional Restroom.

The handrails do not appear to meet current building code requirements for extensions.

Signage in the building is not ADA compliant and wayfinding is lacking.

The doors are not ADA compliant and hardware should be replaced.

C.10.7  Systems

Plumbing

Service

The structure has a 2” water supply with meter.

Piping

Piping consists of insulated copper piping for the domestic water which is in fair condition. The sanitary piping consists of cast iron piping. This appears to be in fair condition. The hot water heater is a natural gas fired 40-gallon hot water tank. It appears to be in fair condition. A small electric water tank is located in Hangar 3, which appears to provide hot water to the handwashing sink. Multiple areas of water piping that have missing or deteriorated insulation which should be replaced.

Fixtures

There are floor mounted water closets and a urinal. There is a wall mounted lavatory. There is a large sink located in the Men’s Restroom. These all appear to be in fair condition. There is a large stainless-steel laundry sink in Hangar 3. This sink drains directly to the grate on the floor. This does not meet current plumbing code.

There is an emergency shower and eyewash station located in Hangar 3.

Gas

It has a 3” natural gas service and meter.
Fire Protection

Sprinkler
There is no sprinkler system in this building.

Fire Alarm
The building has a simplex fire alarm system. There are smoke detectors and pull stations at various exits, and horn strobes provided. The system appears to receive annual inspections.

Extinguishers
The building has multiple portable fire extinguishers throughout which appear to receive annual inspection.

HVAC

System
They have new hot water systems that were replaced in 2015. There are also unit heaters which were replaced with new infrared heaters in 2015. The building also has a DX condenser and window AC units located throughout. Most of these appear to be in good working order.

Distribution
Distribution consists of standard metal supply and return ductwork. There are exhaust fans for the Restroom. The ceilings have lay-in diffusers and supply and return air grills. The Paint Booth has a manual exhaust system.

Controls

There are electronic thermostats which appear to be in good working order.

Electrical

Lighting
The building has lay-in and chain-hung fluorescent lighting with HID lighting. There is also Compact fluorescent and incandescent lighting in the building. The lighting is in working condition. Any burnt out bulbs should be replaced, and eventually all lighting should be replaced with newer lighting technologies such as compact fluorescents or LED lighting.

Lighting Controls
The controls are manual wall switches. Covers can be replaced if desired.

Exit Signs and Emergency Egress Lighting
The building has exit signs and emergency egress lights. Some of the egress lighting is combination exit and emergency lights, which is in good condition. Many of the wall packs are not functioning and there are other areas that do not have egress lighting at all. Egress lighting should be provided in all locations to meet life safety codes. All wall packs should be replaced if not functional. Paper exit signs should be replaced with illuminated exit signs and battery back-ups.

Service and Distribution
The structure has a 1,000-amp 208/120 service. It is distributed by switch gear power distribution panels throughout. Many of these panels are full capacity and appear to be at the end of their useful life and should be
upgraded. There are also panels throughout that have exposed cabling and open aircraft panels, which should be replaced or repaired.

**Telecommunications and IT**

There appears to be telephone and computer access provided in the building. If any improvements are made, additional outlets should be provided. The Server Rom AC service is not adequate for the size Server Room and equipment that is being utilized. This should be upgraded or replaced to provide the proper size equipment for this room.

**Security Systems**

There are a few doors that have keypad locks. These appear to be in good working condition.

**Receptacles**

There are multiple GFCI and standard wall receptacles throughout. Additional outlets should be provided if any additional improvements are undertaken.
C.11  Building 0237 – Airport Maintenance

Source: BCI, 2017  
Condition: Poor

C.11.1  Introduction

Airport Maintenance – 0237 is located at 2160 West Case Road, Columbus, Ohio. The approximate area of this building is 6,200 s.f. The building was constructed in 1948. The building was originally a Storage and Maintenance Facility for the Ohio National Guard. Now, the building is utilized for airport equipment and material storage. The building is made of CMU block walls and a gable roof. There has been a small addition on the north elevation which has an Office, Storage, and a small Restroom. It does not appear that the Office and Restrooms have been utilized in some time. The Office Area is being utilized for storage. There appears to be excessive water leaking in the roof and the wall systems, which has caused the ceiling to deteriorate. There is a portion of the building that has reinforced concrete slabs with the remaining portions of the open area consisting of asphalt paving. There are tile floors in the Office Area, which may be consistent with asbestos type tiles from this time period. This should be inspected by an Environment Inspection Firm. The floors throughout are damaged and need repair or replacement. There is large cracking on the southwest corner of the building around the entry door. The building is lacking proper roof drainage systems. The building is being utilized for storage. The building should be repaired or replaced to ensure that the contents within it are safe and maintained. The structural span varies across the building with the largest span being 80'-0". The clear floor height for the building is 20'-0" at the center. The clear floor height at the hangar door is 10'-0". This building is in poor condition.

Hangar Doors are as follows:

20'-0" x 10'-0"
14'-0" x 10'-0"

C.11.2  Exterior

Walls

The exterior walls are CMU block with an exterior finish system. It appears that there is an asphalt coating that has been installed on the exterior walls. The end walls have corrugated metal panel systems with a painted finish. These should be repainted. There is a large crack near the entry door which should be repaired or remediated.
Roof
The roof is a corrugated metal roof system. It is severely leaking in various places throughout the building. The roof should be replaced in its entirety. The roof drainage system is lacking around the building. There are downspouts around the building that have no gutters attached to them. New gutters and downspouts should be installed to divert storm water away from the building.

C.11.3 Structure
Foundation
The structure has a continuous reinforced concrete footing with CMU block foundation walls. There is a reinforced concrete slab on grade which covers a portion of the open bay and the addition area. The slab is damaged in several areas, but is still functional. These cracks and damage should be repaired. The footings and foundations appear to be in good condition.

Structural Frame
The structural frame consists of load bearing CMU block walls supporting steel roof trusses. There is large step cracking at the southwest corner near the door entry, which needs to be addressed.

The structural system in general appears to be in fair condition. The area of concern is the step cracking at the southwest corner.

C.11.4 Interiors
Walls
Interior walls are painted CMU block walls. There are a few wood stud framed walls with painted gypsum board. The existing walls should be repainted. There are some wall finishes that are damaged and in bad condition, these should be patched and repaired. There is a chain-link fence that runs to the bottom of the steel roof trusses in a secured area of the building. The fencing appears to be in good condition. The Office Area has wood paneling on the existing walls which is in bad condition, and appears to have severe water damage. The folding divider wall in the Bay Area is not functional. This should be removed or replaced.

Floors
The Bay Area consists of reinforced concrete floors and asphalt paved floors. The reinforced concrete floors need to have cracking and damage repaired. The asphalt paved floors should be removed and replaced. There is tile located on a portion of the concrete slab that is damaged and may contain asbestos materials. These tiles should be tested by an Environmental Inspection Firm.

Ceilings
The bay has exposed ceilings which appear to be in fair condition. Some of the structure appears to be rusting due to water exposure. These areas should be cleaned and repainted. Rust inhibitive coatings should be utilized. There are other areas of the facility that have painted gypsum board ceilings which have significant water damage and have even collapsed in many locations. These all need to be removed in their entirety.

Doors and Windows
There are hollow metal entry doors and frames which are in poor condition. These need to be replaced. There are two overhead fiberglass sectional doors and wood frames. These are in poor condition and need to be replaced. The wood frames are rotting. There are both hollow metal and wood doors on the interior. These are in metal
frames and have cylinder hardware. These are all in poor condition, and some even have significant water damage. Some of these doors do not operate properly. The chain-link fence gate located at the secured area has a pad lock. Existing windows consist of steel window frames and single pane glazing. The windows do not operate properly and are original to the building. These should be replaced in their entirety.

Fixed Casework

There is currently wood shelving in the Bay Area. The secure area has wood wall cabinets and metal wall cabinets. These appear to be in good condition. The Restroom has metal toilet partitions which are in poor condition.

C.11.5 Code Analysis

There are multiple means of egress for this facility which meets life safety requirements. It should be noted that the pathway to the egress doors is blocked by storage. There is also no identification on the floor or by signage for exit locations. The chain-link gate does not have panic hardware. Per Building Code, this gate should have panic hardware, so that someone cannot be locked in the secure area. There is no ADA accessibility for the Restroom. There is only a single Restroom in this building. Though this is acceptable for the current use, if the building is modified for another intended purpose, additional Restrooms may be needed.

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.11.6 Systems

Plumbing

Service

The structure has a 1” water supply with meter. The water does not appear to be on at this building.

Piping

The domestic water system has insulated steel piping which is at the end of its useful life and should be replaced if this building is utilized. If there is no need for water at this facility, the line should be capped and abandoned in place or removed in its entirety. Sanitary piping consists of cast iron piping. The system is not utilized at this time. The piping should be removed in its entirety or abandoned in place if it is not needed at this facility.

Gas

There is a 2” natural gas service and meter. There is an electric hot water heater provided in the restroom. It appears that the tank is functional, however, water service is not provided at this time.

Fire Protection

Sprinkler

There is no sprinkler system.

Fire Alarm

There is no fire alarm system.

Extinguishers

There are no fire extinguishers.
HVAC

System
There are gas fired, infrared, radiant heaters in the bay space. Infrared heaters need repair, but appear to be in good condition. There is a gas fired furnace, which is in poor condition and does not appear to be functioning. There is an AC unit which is also not functioning at this time.

Distribution
The distribution system is standard metal supply and return ducts. These appear to be in bad condition, and should be replaced with a new system.

Controls
Building controls are electronic thermostats which control the radiant heaters and furnace. It is not possible to tell if these are in working condition, but should be replaced with a new system.

Electrical

Lighting
Currently, there are surface mounted and chain hung fluorescent lighting. There are a few incandescent lights and HID lights in the building. All lighting should be replaced with newer lighting technologies.

Exit Signs and Emergency Egress Lighting
The structure currently has no exist signs or emergency egress lighting. These should be installed immediately for life safety requirements.

Lighting Controls
Lighting controls appear to be wall mounted, manual light switches. Cover plates should be replaced.

Telecommunications and IT
The structure appears to have telephone accessibility. Additional data outlets and cabling should be provided if this building is to be utilized for its intended purpose or for an additional purpose.

Receptacles
There are a few receptacles provided, but additional outlets should be added if any modifications occur.
C.12 Building 0238 – Hangar 6

C.12.1 Introduction

Hangar 6 is located at 2160 West Case Road, Columbus, Ohio. The approximate area is 5,700 s.f. The building was constructed in 1948. It was originally an Aircraft Storage Facility for the Ohio National Guard. It is now being utilized as an Airport Equipment and Material Storage Facility. The building is a CMU block structure with gable roof. A small storage area is located in the northeast corner of the building, which is utilized for record storage. The bay floor consists of asphalt and concrete. The concrete was placed approximately six years ago. The overhead sectional doors were replaced in approximately 2014. There is a large step crack on the northwest corner of the building. This should be repaired. The building is lacking gutters and downspouts. Storm water is accumulating at the foundation walls. The structural span varies with the largest span being approximately 64’-0”. The clear floor height appears to be 21’-0” at the center. The clear floor height at the hangar door is 11’-8”. This building is in poor condition.

The Hangar doors are as follows:

19’-8” x 11’-8”

C.12.2 Exterior

Walls

Exterior walls are CMU block walls. There are corrugated metal panel systems utilized on the gable ends. There appears to be an asphalt coating finish applied to the face of these walls that is in poor condition and has peeled off in numerous locations. There is a large step crack on the northwest corner of the building. It should be investigated and repaired immediately.

Roof

The roof is a corrugated metal roof system which has a waterproof membrane coating over it. There are significant penetrations through the roof system which need to be repaired. The roof needs to be replaced completely.

Source: BCI, 2017
Condition: Poor
C.12.3 Structure

Foundation
The structure is continuous concrete footings with CMU block walls. The footings and foundations appear to be in good condition. Removing the roof drainage from the foundations would be something that should be addressed immediately before footings begin to have deterioration or settling due to excessive water in and around the foundation system. The presence of excessive water at the foundation is due to a lack of gutters.

Structural Frame
The structural frame consists of load bearing CMU block walls supporting steel roof trusses. The northwest corner of the structure has a significant step crack with separation and displacement. The crack is the full extent of the wall. This needs to be inspected and repaired immediately.

C.12.4 Interiors

Walls
Interior walls are painted CMU block walls. These walls should be repainted. There are some wood stud frame walls with painted gypsum board. Some of the paint finishes are in poor condition and should be stripped and repainted.

Floors
The floor consists of concrete reinforced slab on grade on the west side of the bay. This remains in good condition. The remainder of the bay has asphalt paved floors which are in fair condition. The small storage space has concrete floors, which are also in good condition.

Ceilings
The ceilings consist of exposed painted structure and some painted gypsum board ceilings. All of these appear to be in fair condition, though repainting would be justifiable if additional improvements are made to the building.

Doors and Windows
There are wood doors with wood frames. Many of these are difficult to open and should be replaced. There are hollow metal entry doors and frames which are in fair condition. These should be repainted. The two aluminum overhead sectional doors have automatic openers and were recently installed. These appear to be in good condition. There are some cosmetic items and some surface damage that should be repaired and cleaned.

There are two aluminum overhead sectional doors. The overhead sectional doors can only be operated with a key.

The building has one means of egress. The door does not contain the proper signage or proper hardware. The overhead sectional doors cannot be considered egress doors per the Building Code. The cylinder hardware on the entry door should be replaced, and the door is not ADA compliant.

The windows are steel double hung single pane glass, which appear to be original to the structure. These need to be replaced in their entirety.

C.12.5 Code Analysis

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

The entry door is not accessible.
C.12.6 Systems

Fire Protection

Sprinkler
There is no sprinkler system.

Fire Alarm
There is no fire alarm system.

Extinguishers
There are a few portable fire extinguishers which appear to receive annual inspection.

Electrical

Lighting
The structure has surface mounted compact fluorescent lights in the Bay Area. These appear to be in fair condition. The lights should be replaced with newer lighting technologies.

Exit Signs and Emergency Egress Lighting
Exit signs and emergency egress lighting are lacking in the building. These should be installed immediately to meet life safety requirements.

Lighting Controls
Lighting controls consist of wall mounted manual light switches. These appear to be in good condition. Cover plates could be replaced if desired.

Service and Distribution
The structure has a 100-amp 208/120-volt service. The distribution occurs through a single panel. This panel needs to be replaced and upgraded.

Receptacles
There are a few wall receptacles. If improvements are made to the facility, additional receptacles should be added to the building.
C.13 Building 0239 – Hangar 7

C.13.1 Introduction

Hangar 7 is located at 2160 West Case Road, Columbus, Ohio. The GSF of this building is 9,900 sf.

The building was constructed and relocated to KOSU in 1976. The structure consists of CMU block walls with barreled roof trusses. This building is well maintained and in average condition. The structural span varies across the building with the largest span being 80'-0". The clear floor height is 31'-8" at the center of the bay. The clear floor height at the hangar doors is 21'-0". The clear floor height at the eave is 21'-3". This building is in average condition.

Hangar Doors are 78'-0" x 21'-0"

The following aircraft was housed at this location at the time of the assessment.

N878SP
N5RB
N984C

C.13.2 Exterior

Walls

Exterior walls are CMU block with an exterior finish system and asphalt coating. There is painted metal panel system installed on the end walls of the barrel roof. These should be stripped and repainted.

Roof

The roof has a fully adhered roof and flashing system. It was noted this was installed in approximately 2004 and is in fair condition. The roof drainage system consists of gutters and downspouts. These downspouts tie into cast iron boots. Downspouts and gutters should be repaired where damaged.
C.13.3 Structure

Foundation
The building has reinforced concrete footings with CMU block foundation walls. The reinforced concrete slab grade on grade floor is in good condition as is the main foundation footing.

Structural Frame
The structure consists of CMU block walls with steel columns and beams supporting steel barrel roof trusses. The structure has cross bracing for wind and appears to be in good condition.

C.13.4 Interiors

Walls
The interior walls consist of painted CMU block perimeter walls. These need to be repainted.

Floors
The floors are reinforced concrete slab on grade and appears to be in fair condition, though there is floor cracking occurring. The wall and floor are separating from each other. Expansion material should be provided around the perimeter of the building.

Ceilings
The building has exposed painted structure. The structure should be cleaned and repainted.

Doors and Windows
There is a folding hangar door with an automatic opener. There are also hollow metal entry doors and frames with panic style hardware. The folding fiberglass hangar door has insulation and is in good condition. The entry doors are in good condition except that the door should be repainted. Windows consist of window pane steel window frames in glass. These appear to be original to the structure and should be replaced.

C.13.5 Code Analysis
The entry doors on the north side of the building are ADA compliant as are the entry doors on the south side of the building. The folding hangar doors are not ADA accessible. The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components. The building has multiple means of egress which meet Life Safety requirements.

C.13.6 Systems

Plumbing

Piping
There is a 1” compressed air which comes from hangars 1, 2, and 3. This appears to be in working condition.

Gas
There is a 3” gas service with meter.
Fire Protection

Sprinkler
No sprinkler is provided in this building.

Fire Alarm
No fire alarm is provided in this building.

Extinguishers
There are a few extinguishers which appear to be tested annually.

HVAC

System
The primary source is gas fired infrared radiant heaters. These appear to be in good condition but do need repair in a few locations.
There are electronic thermostats provided for the radiant heaters. These appear to be in good condition.

Electrical

Lighting
Lighting consists of chain hung fluorescent light fixtures. There is exterior HID lighting which has yellow covers. These are in working order but should be replaced with newer lighting technologies.

Lighting Controls
Controls consist of wall mounted light switches and HID relay panels. Cover plates could be replaced if desired.

Exit Signs and Emergency Egress Lighting
Exit signs and emergency egress lighting combination units with battery backup are provided. These appear to be in good working condition.

Service and Distribution
The building has a 400-amp service. Distribution occurs through multiple panels.

Receptacles
There are multiple GFCI and standard receptacles provided, however if any improvements take place, additional outlets should be added.
C.14 Building 0256 – Hangar 8

C.14.1 Introduction
Hangar 8 is at 2160 West Case Road, Columbus, Ohio. The approximate area of this building is 19,000 sf. The building was constructed in 1980 for Worthington Industries. The building was renovated in 2008 and again in 2015. The hangar is a steel building with CMU block portions in the office area. The structure is still occupied by Worthington Industries, which has a small lobby and offices for pilots and passengers. The office area was recently remodeled, and the finishes appear to be in good condition. The hangar portion has received new insulation on the walls and ceilings. The floors were recently covered with epoxy floor covering. The floor is in good condition. The structural span varies with the largest expanse being 136’-0”. The clear floor height is 50’-0” in the center and the clear floor height at the hangar door is 30’-0”. The clear floor height at the eave is 32’-0”. The building is in average condition.

The following aircraft was housed in the hangar at the time of the assessment.

The hangar doors are 100’-0” x 30’-0”

The following aircraft was housed at this location at the time of the assessment: 1253W

C.14.2 Exterior
Walls
The exterior walls are insulated standing metal wall systems. The office area entry has white brick veneer. This brick should be cleaned. The metal system should be repainted.

Roof
The roof is insulated standing seam metal roof system with metal flashings and trim. The roof was replaced in 2014 and is in good condition. The roof drainage system consists of aluminum gutters and downspouts.

C.14.3 Structure
The footings consist of continuous reinforced concrete footers and concrete piers. The slab is a reinforced concrete slab on grade and appears in good condition.

The structural frame consists of steel columns and CMU block walls with steel roof trusses supporting the building on the east elevation. The structure appears to be in good condition.

Interiors

Walls

Interior walls are metal stud frame walls with painted gypsum board. Some areas of the office space have wall covering. The hangar itself has CMU block walls to approximately 10’-0” along the east elevation where the standing seam metal panel system continue with insulation to the roof deck. The metal panel system continues up to the deck. This has insulation which is in good condition.

Floors

Floors consist of reinforced concrete slab on grade with broadloom carpeting, VCT, and ceramic tile. The hangar floor has recently been coated with an epoxy floor finish which is still in good condition. The other finishes in the office areas are in good condition.

Ceilings

Office and storage spaces have acoustical ceiling systems. There are painted gypsum board ceilings in the restroom areas. These are all in good condition. The hangar has exposed structure with spray on insulation. These are in good condition.

Doors and Windows

The exterior doors consist of aluminum glass storefront at the entry area. These are in good condition. The others are hollow metal entry doors and frames, some with half lights and they all have the appropriate hardware. There are overhead aluminum sectional doors with automatic openers and sliding steel hangar doors with steel tracks. Both door types are in good condition. There is some cosmetic and surface damage that needs to be repaired on the doors. Office areas have solid six panel wood doors and hollow metal frames. These doors are in good condition. There are hollow metal doors and hollow metal frames between the office area and the hangar bay. These have vision lights in them and lever hardware. These doors are in good condition.

Windows are aluminum framed with double pane glass and are a fixed window system. These are in good condition. There is also an aluminum glass door for an entry which is also in good condition. There is aluminum storefront entry with glazing.

Fixed Casework

There are metal wall lockers and metal restroom partitions which are in fair condition. The kitchenette has wood base cabinets and laminate countertops which are in good condition.

Code Analysis

The double sliding hangar doors are not ADA compliant even though they provide a man door. The hollow metal entry doors are not ADA compliant nor are the overhead sectional doors. There is an ADA compliant entry door at the glass storefront entry system on the east side of the building. This entry door is also accessible.
The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.14.6 Systems

Plumbing

Service

There is a 1-1/4” water supply and meter.

Piping

There is insulated copper piping for the domestic water system which is in fair condition. The sanitary piping consists of cast iron piping which appears to be in good condition. The building’s hot water source is a gas fired 30-gallon water heater, which appears to be in good condition. There is a 1-1/2” compressed air in the hangar area.

Gas

Natural gas piping consists of a 3” natural gas service with meter. This appears to be in good condition.

Fire Protection

Sprinkler

There is no sprinkler system in the building.

Fire Alarm

The fire alarm system consists of smoke detectors, pull station at exits, interior alarm bells, and exterior hangar lights and horns. The system appears to receive annual inspections.

Extinguishers

Portable fire extinguishers are located throughout and receive annual inspection.

HVAC

System

The primary source is gas fired forced air for the office space and gas fired infrared heating for the hangar area. These are in good condition. There are a few locations on the infrared heaters that need to be repaired. There is a AC condensing unit which is in good condition.

Distribution

The distribution is handled from exhaust fans interconnected with outside air louvers and large industrial ceiling fans. These are all in good condition. Other distribution equipment consists of standard metal and flex duct supply and return air. These are located above the ceilings above the office spaces. These all appear to be in good condition.

Controls

Electronic thermostats control the heaters and systems. These appear to be in good working order.

Electrical
**Lighting**

There is chain hung fluorescent light fixtures in the office spaces. These are in good condition. The hangar area has new LED light fixtures which are in good condition. Exterior HID lighting is adequate but should be replaced with newer lighting technologies.

Some light fixtures in the office area have emergency ballasts with battery backup. These appear to be in good working order.

**Exit Signs and Emergency Egress Lighting**

Exit lighting and emergency egress lighting illuminated exit signs with battery backups are located at the exits. The emergency egress lighting is provided with emergency wall packs and battery backups in the hangar area. These are older fixtures which should be replaced.

**Lighting Controls**

Wall mounted manual light switches along with HID relay panels are provided and in good condition. Cover plates can be replaced if desired.

**Telecommunications and IT**

There is adequate telephone and computer coverage. If improvements are made additional outlets should be provided.

**Security Systems**

The building contains internal motion sensors with key pad locks on some doors. These items are monitored by the tenant and appear adequate for the condition.

**Receptacles**

There are numerous GFCI and standard receptacles throughout the facility. If improvements are made on this facility additional outlets should be provided.
C.15 Building 0900 – Hangar 9

C.15.1 Introduction

Hangar 9 is located at 2160 West Case Road, Columbus, Ohio. The approximate area of this building is 33,100 sf. The building was constructed in 1986. A renovation took place in 2011. This structure is gabled with two shed roof additions on the east and west elevations. The hangar is a steel structure consisting of steel columns and steel roof trusses. There are suites provided along the east and west elevation. Several of these are leased and have updated finishes by the tenants. The vacant suites need to be cleaned and updated so they can be leased out. The structure has secure storage areas on each wing along with caged areas with padlocks. The building is also known as Cardinal Health. The structural span varies across the building with the largest span 148’-0”. The clear floor height is 36’-0”.

This building is in average condition.

The following is a list of aircraft that were housed in the hangar at the time of the assessment.

- N800CH
- N12LA
- N91DP
- N200CH
- N968UD
- N900CH
- N400EC

C.15.2 Exterior

Walls

The exterior walls are a standing seam metal wall panel system. These need to be stripped and repainted.

Roof

The roof is an insulated standing seam metal roof system. The roof is in fair condition. The roof drainage system consists of gutters and downspouts. These downspouts drain into cast iron boots. Some of the gutters and downspouts need to be repaired and repainted.
C.15.3 Structure

Foundation
The foundation is comprised of continuous reinforced concrete footings with concrete piers at column locations. There is a reinforced concrete slab on grade. All of these systems appear to be in good condition.

Structural Frame
The structural frame consists of an engineered steel structure with steel posts, columns, along with steel roof trusses and steel girts and purlin system. The structure appears to be in good condition and structural integrity is intact.

C.15.4 Interiors

Walls
Interior walls in the hangar area are exposed batt insulation over the exterior metal wall panel system. There is standing seam metal siding installed 12'-0” around the perimeter. These panels should be repainted. The office areas have metal stud frame walls with painted gypsum board. Some walls have coverings, such as wallpaper. These areas in tenant spaces have been updated and are in good condition. Vacant spaces are outdated and need to be renovated. There are also glass wall panels installed for the conference room which are in good condition. There are metal cages in select storage areas. These are in good condition.

Floors
Floors are reinforced concrete slab on grade. They are coated with epoxy floor covering in the hangar area. The slab has significant cracking and the epoxy coating appears to be severely worn. The cracking does not appear to be of structural concern but should be monitored. The interior office spaces have broadloom carpet and carpet squares. The tenant spaces are in good condition however, the vacant spaces are in need of replacement.

Ceilings
The hangar has exposed structure which should be repainted. Insulation is exposed for the roof areas. Any damaged insulation should be repaired or replaced. The interior office spaces have acoustical ceiling systems. Several areas are missing tiles. There are also numerous areas with water damaged ceiling tiles or stained ceiling tiles which need to be replaced. Restrooms have painted gypsum board ceilings which need repainting.

Doors and Windows
The exterior hangar doors consist of sliding hangar doors on steel tracks which are in good condition. There is some damage to the doors and tracks that need to be repaired. There is hollow metal entry doors and frames around the perimeter. Some of these have broken or loose hardware sets which need to be replaced. There are also numerous doors that are beginning to rust that should be cleaned and repainted with a rust inhibitor. There are hollow metal doors and frames between suites and the hangar area. These are in fair condition. They need to be repaired and repainted. The suites contain wood doors and metal frames. Doors in the vacant suites need to be replaced. Doors in the leased spaces are in good condition. Most of the doors have lever or cylinder hardware. There is a caged area with gates with padlocks.

Windows consist of aluminum sliding window with double pane glazing which are original to the structure and need to be replaced.

Fixed Casework
Many of the suites have wood base and wall cabinets. There are a few that have laminate base and wall cabinets with laminate countertops. There is modular office furniture provided which is in good condition. There are a few
vacant tenant spaces that have modular office furniture which need to be replaced. Some of the restrooms have wood or laminate vanities which are outdated and should be replaced. There are metal wall lockers provided in various locations which are in fair condition. It should be noted there is two safety harness and fall protection devices in the hangar for plane inspection. All of these appear to be maintained.

C.15.5 Code Analysis

There are multiple means of egress from the building, which meets Life Safety requirements. There is no roof fall protection visible. ADA signage should be added especially to the tenant and restroom areas. The restrooms in the suites are not ADA compliant. Several of them have had accessible features and accessories added to them but they still do not meet ADA accessibility standards. The entry doors around the perimeter of the building are not ADA compliant.

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.15.6 Systems

Plumbing

Water Service

Water service is a 2” water supply and meter.

Piping

Piping consists of insulated copper piping for the domestic water system which is in fair condition.

The sanitary piping is cast iron piping. This appears to be in fair condition. The hot water source consists of several small electric points-of-use hot water heaters. They are installed in the suite areas. These are in good condition. The remaining areas have small 5-gallon electric hot water heaters mounted above ceilings in the restrooms. These are changed out to on-demand systems as they fail. Many of these above-ceiling units have leaked, which has caused significant water damage to the ceilings.

There is a 1-1/2’ compressed air which is in good condition.

Fixtures

Restrooms have typical floor mounted water closets, sinks, in vanities, and some wall lavatories.

Gas

There is gas piping with meter.

Fire Protection

Sprinkler

There is no sprinkler system in the building.

Fire Alarm

There is an auto call fire alarm system with heat and smoke detectors, pull stations and exterior hanger lights with horns. The fire alarm appears to receive annual inspection.
**Extinguishers**

There are portable fire extinguishers located throughout which appear to receive annual inspection. It should be noted there is an AED located at the Cardinal Health Area.

**HVAC**

**System**

The primary source is gas fired infrared radiant heaters located in the hangar areas. Suites contain through wall units. Several of these units in the unoccupied suites are not operational. These should be tested and repaired as needed, prior to leasing these vacant spaces.

**Distribution**

Air louvers in the hangar which are connected to area exhaust fans. These appear to be in working condition.

**Controls**

Building controls consist of electronic thermostats which control the infrared heater and thru wall units. These appear to be in working condition. There appear to be drastic temperature swings between spaces. Thermostats may need to be replaced as spaces are leased.

**Electrical**

**Lighting**

Lighting consists of chain hung complex fluorescents. There is some exterior HID lighting. The hangar area utilizes fluorescent fixtures with automatic sensors and timers. There is some incandescent lighting that remain in the suite areas. The HID lighting should be replaced for newer technologies.

**Exit Signs and Emergency Egress Lighting**

Exit signs with battery backups are provided and in good condition. Emergency egress lighting, wall packs with battery backups are provided and are in good condition.

**Lighting Controls**

Lighting controls consists of an HID relay panel and wall mounted light switches. Cover plates should be replaced in the vacant suites prior to them being leased. Other areas can be replaced if desired.

**Service and Distribution**

The service consists of a 200-amp 208/120-volt service. The distribution occurs through switch gear power distribution panel and ten separate tenant meters and other multiple panels.

**Telecommunications and IT**

Adequate telephone and computer coverage is provided in the building. Additional outlets should be added as improvements are made to the building.

**Security Systems**

There are CCTV cameras and motion detectors in the Cardinal Health Suites. These are locally monitored and maintained by the tenant. There are secured storage areas with locked gates which are in good condition.
Receptacles

There are multiple GFCI and standard receptacles in the suites and in the hangar. Additional outlets should be added as improvements occur. There are higher amp receptacles located in the hangar area for aircraft purposes.

C.16 Building 0901 – Hangar C

C.16.1 Introduction

T-Hangar C is located 2160 West Case Road, Columbus, Ohio. The approximate area of this building is 17,200 sf. The building is a steel structure with low gable roof. The hangars have large folding hangar style doors and hollow metal entry doors. The exterior of the building is standard standing seam metal wall panel systems. The building contains 15 available hangars for rent. The south end of the building has a small mechanical room and office area. The mechanical room and office have reinforced concrete slabs on grade floors. The office area has concrete floor with broadloom carpet and vinyl flooring. It was reported there has been water issues in the hangars due to condensation. The floors for the hangar bays are paved asphalt. The building is in average condition.

The building was constructed in 1986. The building was originally called T-Hangar 4 and has been renamed T-Hangar C. The vertical spans vary across the building. The largest span is 30’-0”. The clear floor height is 12’-0”.

During the walk through, there were locations where water was ponding in front of the man doors for the hangars. The pavement should be repaired in these locations to avoid ponding water at the main doors.

The Hangar doors are 40’-11” x 14’-4”

The following is a list of aircraft that were housed in the hangar at the time of the assessment.

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<td>C15</td>
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</table>
C.16.2 Exterior

Walls
The exterior walls are standing seam metal wall panel systems. There are several areas with minor damage which should be repaired. The building is prefinished paint however there are areas that have been chipped or peeled due to damage. These areas should be stripped and repainted.

Roof
The roof is a standing seam metal roof system. The roof has rusted in some locations and should be repaired. The roof drainage system consists of steel gutters and downspouts which drain to cast iron boots. Some of the gutters and downspouts are damaged and should be repaired if any improvements are conducted on this building. Locations where they do not connect to the cast iron boots should be repaired immediately so that proper drainage occurs.

C.16.3 Structure

Foundation
Foundations consist of reinforced concrete footings and concrete piers at the column locations. There is reinforced slab on grade concrete floors in the mechanical and office area. These appear to be in good condition.

Structural Frame
The structural frame consist of steel posts, columns and beams with roof trusses and steel girts and purlin systems. The structural frame appears in good condition and structural integrity is intact.

C.16.4 Interiors

Walls
The walls are wood stud frame with painted gypsum board in the office area. These areas should be repainted. The hangar areas are exposed standing seam metal panel systems. These are in good condition, minus some damage that has occurred. The damage should be repaired. Paint damage or peeling should be stripped, repaired and repainted.

Floors
The office and mechanical space has reinforced concrete slab on grade. These areas have broadloom carpet and rolled vinyl flooring in some areas. They are in fair condition, though the carpet and vinyl flooring should be replaced if any improvements are made to the building. The hangar areas have asphalt paved floors which are stained from hydraulic oil and jet fuel. Many of them have cracking and are worn. They are still functionally acceptable. However, any patching and repairing could be conducted as needed if improvements are undertaken for the building.

Ceilings
The office space has acoustical ceiling systems which need replacement. The hangars have exposed painted structure which appears to be in good condition. It has been noted that there have been some water issues due to condensation. There was no evidence visible during the walkthrough of this still occurring but should be monitored.

Doors and Windows
The hangar doors are folding doors with steel tracks. There are built-in steel entry doors in metal frames that are in good condition. Doors have automatic openers; however, the openers must be operated from the interior of the hangar. The hollow metal doors and metal frames for the building have cylinder hardware. These are in good
working order. There is cosmetic damage to many of the doors and folding doors. Some of the frames are rusty and should be repaired and repainted.

Sliding aluminum windows with single pane glass are original to the structure. They appear to be in good working order, though if improvements are made to the building, replacing the windows would be beneficial.

C.16.5 Code Analysis

There are multiple means of egress from the building. This meets Life Safety requirements. The entry doors around the perimeter are not ADA accessible. The folding hangar doors are also not ADA accessible since there is no exterior means to operate them.

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.16.6 Systems

Fire Protection

Sprinkler

There is no sprinkler system for the building.

Fire Alarm

The structure has a fire alarm system with heat detectors inside the hangars. There are pull stations at the ends of the building. There are lights and horns provided on the exterior as well. These appear to be tested annually.

Extinguishers

There are portable fire extinguishers throughout the building. These appear to be tested annually.

HVAC

System

There is a window unit for heating and cooling in the building. It appears to be in working condition.

Controls

The window unit has a built-in thermostat which appears to be in working order.

Electrical

Lighting

The structure has standard fluorescent lighting in the office area. The hangars have incandescent and HID lighting which are surface mounted, or chain hung from the structure. All lighting should be replaced with modern lighting technologies.

Exit Signs and Emergency Egress Lighting

The structure does not have any exit signage, which should be installed for life safety requirements. The emergency egress lighting is lacking for the building and should be installed for Life Safety requirements.

Lighting Controls

Lighting controls consist of wall mounted manual light switches. Cover plates could be replaced if desired.
Service and Distribution

The structure has a 200-amp 208/120 service with meter. Distribution occurs from two distribution panels. These appear to be in good condition.

Telecommunications and IT

There is adequate telephone coverage for the building. If any improvements are made, additional outlets and data systems should be added.

Receptacles

There are adequate wall receptacles throughout the building. Additional receptacles should be added if further improvements to the building are made.
C.17 Building 0904 – Hangar D

Introduction

T-Hangar D is located at 2160 West Case Road, Columbus, Ohio. The approximate area of this building is 17,200 sf. The building was constructed in 1986. The hangar has large folding hangar doors and built-in steel entry doors. The building has 15 hangars available for rent. There is a small office, storage, and service area located on the north and south side of the building. The hangars have asphalt paved floors and the office and storage, and service areas have reinforced concrete slab on grade floors. This building has also had water issues due to condensation. At the time of the visit, these water issues were not apparent, however, it was noted that it does occur. This facility was originally named T-Hangar 5 and has since been changed to T-Hangar D. The clear floor height is 12’-0”.

This building is in average condition.

The Hangar doors are 40’-11” x 14’-4”

The following is a list of aircraft that were housed in the hangar at the time of the assessment.

D1 - N9514L  D6 - Empty  D11 - N9207T
D2 - Empty  D7 - N2307U  D12 - N95639
D3 - N2636H  D8 - N1194Z  D13 - N116HR
D4 - N5905J  D9 - N8311C  D14 - N210GS
D5 - N12B6  D10 - N715AC  D15 - N2713W

C.17.2 Exterior

Walls

The exterior walls are standing seam metal wall panel systems. There are several areas with minor damage which should be repaired. The building’s exterior has been painted with prefinished paint. There are areas that have been chipped or peeled due to damage. These areas should be stripped and repainted.
Roof
The roof is a standing seam metal roof system. The roof has rusted in some locations and should be repaired. The roof drainage system consists of steel gutters and downspouts which drain to cast iron boots. Some of the gutters and downspouts are damaged and should be repaired if any improvements are conducted on this building. Locations where they do not connect to the cast iron boots should be repaired immediately so that proper drainage occurs.

C.17.3 Structure
Foundation
Foundations consist of reinforced concrete footings and concrete piers at the column locations. There is reinforced slab on grade concrete floors in the mechanical and office area. These appear to be in good condition.

Structural Frame
The structural frame consist of steel posts, columns and beams with roof trusses and steel girts and purlin systems. The structural frame appears in good condition and structural integrity is intact.

C.17.4 Interiors
Walls
The walls are wood stud frame with painted gypsum board in the office area. These areas should be repainted. The hangar areas are exposed standing seam metal panel systems. These are in good condition, minus some damage that has occurred. The damage should be repaired. Paint damage or peeling should be stripped, repaired and repainted.

Floors
The office and mechanical space has reinforced concrete slab on grade. These areas have broadloom carpet and rolled vinyl flooring in some areas. They are in fair condition, though carpet and vinyl flooring should be replaced if any improvements are made to the building. The hangar areas have asphalt paved floors which are stained from hydraulic oil and jet fuel. Many of them have cracking and are worn. They are still useful for the purpose of the building. Any patching and repairing could be conducted as needed if improvements are undertaken for the building.

Ceilings
Building has exposed painted ceilings which appear to be in fair condition.

Doors and Windows
Sliding aluminum windows with single pane glass are original to the structure. They appear to be in good working order. If improvements are made to the building, replacing the windows would be beneficial. The hangar doors are folding doors with steel tracks. There are built in steel entry doors in metal frames that are in good condition. Doors have automatic openers, which must be operated from the interior of the hangar. The hollow metal doors and metal frames for the building have cylinder hardware. These are in good working order. There is cosmetic damage to many of the doors and folding doors. Some of the frames are rusty and should be repaired and repainted.

C.17.5 Code Analysis
There are multiple means of egress from the building. This meets Life Safety requirements. The entry doors around the perimeter are not ADA accessible. The folding hangar doors are also not ADA accessible since there is no exterior
means to operate them. The building does not meet the current energy code for R values for insulation, or for roof
or wall assembly components.

C.17.6  Systems

Fire Protection

Sprinkler

There is no sprinkler system for the building.

Fire Alarm

The structure has a fire alarm system with heat detectors inside the hangars. There are pull stations at the ends of
the building. There are lights and horns provided on the exterior as well. These appear to be tested annually.

Extinguishers

There are portable fire extinguishers throughout the building. These appear to be tested annually.

Electrical

Lighting

The structure has standard fluorescent lighting in the office area. The hangars have incandescent and HID lighting
which are surface mounted, or chain hung from the structure. All lighting should be replaced with modern lighting

technologies.

Exit Signs and Emergency Egress Lighting

Exit signs and emergency egress lighting. The structure does not have any exit signage which should be installed for
life safety requirements. The emergency egress lighting is lacking for the building and should be installed for Life
Safety requirements.

Lighting Controls

Lighting controls consist of wall mounted manual light switches. Cover plates could be replaced if desired.

Service and Distribution

The structure has a 200-amp 208/120 service with meter. The distribution occurs through a distribution panel.
These appear to be in good condition.

Telecommunications and IT

There is adequate telephone coverage for the building. If any improvements are made, additional outlets and data
systems should be added.

Receptacles

There are adequate wall receptacles throughout the building. If any work is conducted on this, additional receptacles
should be added.
C.18 Building 0978 – Med Flight Hangar

C.18.1 Introduction

The Med Flight Hangar is located at 2827 West Dublin Granville Road, Columbus, Ohio. The approximate area of this building is 42,200 sf. The building was constructed in 1972 with renovations occurring in 1975, 2006 and 2011. Originally the building was built for the Ohio Army National Guard. In 1976 the hangar was expanded. In 2006, Med Flight began leasing the building. In 2008 it was turned over to the Ohio State University. Med Flight has all responsibilities regarding maintenance of the hangar and has had several projects during the past few years. The flat roof of the structure varies in height, and several areas of the roof have been replaced in 2016. The hangar has had bird netting recently installed in 2016. The paint finish on a large portion of the hangar metal roof deck is peeling significantly. This may be caused by condensation or inappropriate paint selection for galvanized roof decking.

There have been numerous improvements to the interior finishes. A generator and fluorescent hangar lighting have been installed. The structural span for the building varies with the largest span being 130’-0”. The clear floor height is 30’-8” in the center of the bay area and 9’-0: at the second-floor level. The clear floor height at the hangar doors is 23’-6”. The clear floor height at the eave is 26’-0”. The Med Flight Hangar houses aircraft and vehicles for Metra Aviation Nationwide Children’s hospital. This facility is in average condition.

The Hangar doors are 70’-0” x 23’-6”

C.18.2 Exterior

Walls

The exterior walls are load bearing CMU block walls with brick veneer. There are insulated metal panels on portions of the exterior façade. The brick around the building needs to be cleaned but is in adequate condition.

Roof

The building has multiple insulated, flat roofs with metal decking. The roof was recently replaced in 2016 due to significant water issues that were occurring. The new roof is in good condition and appears to have addressed the water infiltration issues.
The roof drainage systems consist of cast iron roof drains with cast iron storm piping that routes through the interior and discharges into the underground storm piping. The system seems to be in good working condition.

Amenities

There is a large apron that also has multiple heliports for the helicopters to land. An awning at the entry to the classroom has been installed to allow people to get out of the weather and wind.

C.18.3 Structure

Foundation

Foundations and footings consists of continuous reinforced concrete footings and concrete piers with CMU block walls. There is reinforced concrete slab on grade floors. There is cracking in some of the concrete slabs. The cracks have not settled significantly and do not appear to be a structural concern. The CMU block does have some cracking in various locations which should be inspected and repaired. The structural frame consists of load bearing CMU block perimeter and interior load bearing walls. There are steel roof trusses.

Structural Foundations

The structure is in good condition and the structural integrity is intact.

C.18.4 Interiors

Walls

The interior walls are painted CMU block walls which have recently been repainted. Metal stud frame partition walls with gypsum board have also been recently repainted. These appear to be in good condition and are well maintained. The restroom and locker room areas are ceramic tile walls. Some walls also have epoxy coating applied to them. These appear to be in adequate condition.

Floors

The structure has reinforced concrete slab on grade floors. The hangar bay has epoxy coating which is in good condition. Several of the support or service areas around the bay area have exposed concrete floors. Many of the interior offices and other spaces have carpet squares or broadloom carpeting. The majority of these are in good condition.

Ceilings

The ceilings consist of exposed ceilings in the bay area. Bird netting has recently been installed. Interior spaces have painted gypsum board ceilings or acoustical ceiling systems. Many of the acoustical ceilings have stained tile which should be replaced. The bay area paint should be stripped and repainted with the appropriate paint type for galvanized metal decking.

Doors and Windows

Aluminum storefront frame systems along with single and double hollow metal doors and hollow frames are in good condition. There are overhead and rollup steel doors in some of the service areas. Many of these have peeling or chipped paint and need to be repainted. There are sliding insulated hangar doors on steel tracks for the large bay area. Weather stripping should be replaced. There are also a few built-in man doors for these large hangar doors which do have some rust that should be repaired. Many of the interior doors are hollow metal frames with hollow metal doors. There are hollow or solid core wood doors and wood frames. Many of the doors have cylinder
hardware. There are some doors with half lights provided. The doors appear to be in good condition. There are some doors that have some cosmetic damage that should be repaired.

The windows consist of aluminum frames with double-paned glazing. Many windows on the south side appear to be leaking due to staining and pooling of water on the window sills. These should be replaced and re-flashed. There are some windows that have been replaced in the past with vinyl double hung windows with double pane glass. These appear to still be in good condition.

C.18.5 Vertical Circulation

Stairs and Elevator

The stairways for the building consists of steel stringers and steel pans with concrete infill. These have been covered with a rubber tread system. The walls of the stairways are painted CMU block walls. There are steel tube handrails for the stairwells. The stairs are in good condition. There is no elevator in this building.

Fixed Casework

There are numerous kitchenettes which have wood base and wall cabinets and laminate countertops. There is a mail copy area with wood base and wall cabinets and laminate countertops. These are in good condition. There are restrooms, locker rooms and sleeping areas which have metal wall lockers. The restrooms contain metal wall partitions which are in good condition. There is a large mobile storage unit system which is still functional and in good condition. There is a crane and a vehicle lift located in the bay area for maintenance purposes.

C.18.6 Code Analysis

This building has multiple means of egress which meet life safety requirements. Restrooms are not fully handicap accessible. The building does not have an elevator for accessible access to the upper level. There does not appear to be adequate fall protection for the roof which is a violation of OSHA and Building Code. The aluminum storefront entrance is ADA compliant, however, the remaining doors around the building are not ADA compliant.

The building does not meet the current energy code for R values for insulation or for roof or wall assembly components.

C.18.7 Systems

Plumbing

Service

Water service is a 3” water supply with meter.

Piping

The piping inside the building consists of copper piping and fittings which are in good condition for the domestic water system. Sanitary piping consists of cast iron piping which is in good condition. Cast iron piping goes to an oil separator and septic tank. There is PVC piping provided for the acid waste and vent system. The hot water source is gas fired 72-gallon tank for the building. The tank is functional, but it was noted that this tank needs to be enlarged for the building size.

There is miscellaneous piping. There is 1-1/2” compressed air in the bay area. This appears to be in good working condition.
Fixtures

Fixtures consist of wall mounted water closets and urinals. Lavatories are wall mounted and all appear to be in good condition. There are some restrooms with laminate countertops and drop-in sink basins. There are also wood vanities in other locations with drop in sink bases. Most of these are in good condition, though the sinks and faucets should be caulked. There is emergency eyewash and shower stations in the bay area which appear to be tested annually. There are Kitchenettes with stainless steel sinks and under counter dishwashers. The facility has wall-mounted water fountains on the interior of the hangar bay and in the office areas. These appear to be in good condition. There are shower stalls provided with CMU block with ceramic tile which appear to be in good condition. There is a laundry sink which is heavily utilized but appears to be in good working condition.

Gas

Gas piping consists of 3” natural gas service with meter.

Fire Protection

Sprinkler

There is no sprinkler system in this building

Fire Alarm

There is a fire alarm provided with smoke detector stations at various exits and horn strobes. The system appears to be tested annually.

Extinguishers

The building also has an AED unit located on the second floor. Portable fire extinguishers are provided throughout and receive annual inspection. The bay area does have CO2 fire suppression roll-around bottles available. These appear to be tested annually.

HVAC

System

The HVAC system consists of gas fired hot water boiler circulating pumps. There are baseboard and unit heaters in various areas. There is also gas fired infrared heaters in various areas. There is also gas fired infrared radiant heaters in the hangar bay area. These appear to be in good condition. There was some minimal damage to the infrared radiant heaters which should be repaired.

Distribution

Distribution consists of outside air louvers for the exhaust fans. The distribution system also utilizes standard metal supply and return air ducts. There are lay-in diffusers and supply and return grills in the ceiling systems. Hydraulic water piping is utilized for the boiler system. This appears to be steel piping with insulation on the return lines. There are some areas where the insulation is damaged and should be repaired.

Controls

The building controls consist of electronic thermostats which appear to be in good condition. There is a paint room provided with an exhaust fan. This exhaust fan is controlled by a manual switch on the wall. It was noted that some of the exhaust fans in the bay and paint area should be replaced due to operational issues.
Electrical

Lighting

The lighting consists of lay-in and chain-hung fluorescent light fixtures, both of which are in good condition and have recently been replaced. Many of the interior spaces, such as offices, have compact fluorescent lighting which have also recently been replaced. Exterior lighting is HID type which is in good condition, but should be replaced if improvements are made to the building utilizing newer lighting technologies.

Exit Signs and Emergency Egress Lighting

There are illuminated exit signs throughout the building along with combination egress lights with battery backups. All of these appear to be in good condition. There are emergency egress wall packs provided along with combination units with battery backups. These appear to be in good condition.

Lighting Controls

Lighting controls consist of wall mounted light switches, and there is a HID relay panel provided. These are in good condition.

Service and Distribution

Structure has 800-amp and 1200-amp 208/120 service. These are brought from a transformer. Distribution occurs through switch gear power distribution panels, which are in good condition. There are emergency power distribution panels, which are also in good condition.

Telecommunications and IT

There is a wall mounted cooling unit for the second floor IT room, and it is in good condition. The telephone cable, TV, and computer IT systems are provided throughout. These appear to be in good condition. If any improvements are made to the building, additional outlets should be provided as needed per the tenant.

Security Systems

The structure has a CCTV around the exterior of the building. There are also some interior rooms that are monitored. All monitoring is localized to this building. There are some areas with key pad locks on various entry doors. These all appeared to be in good working condition.

Receptacles

There are GFCI and standard receptacles located throughout the building. If any improvements are made to the building additional outlets should be provided as needed per the tenant.

Emergency Power

There is a diesel fuel generator with fuel tank. This handles emergency lighting and power distribution panels. There is also a smaller natural gas fired generator which is used for the IT system in the building. These all appear to be recently installed and in good condition. It should be noted these should be tested regularly and diesel should be recycled regularly.
C.19  Building 0993 – Airport Blue Barn

C.19.1  Introduction

The Airport Blue Barn is located at 1895 West Case Road, Columbus, Ohio. The Airport Blue Barn is a small structure with a gable roof. Three sides of the building had significant water ponding. The grade around this building should be regraded to allow water to divert away from the foundation. The building is primarily used for storage of various equipment. The building was constructed in 1965.

The approximate area is 900 sf. The date of construction is unknown. The structural span varies but the largest span is 25’-0”. The clear floor height for the building is 19’-6” at the center. The clear floor height at the doors is 14’-0”. This building was in poor condition.

The Hangar doors are 12’-4” x 14’-0”

C.19.2  Exterior

Walls

The exterior walls consist of standing seam metal panels and wood planking. The wood planking appears to be in good condition but should be coated with a water-proof coating. The metal siding is rusted and damaged in numerous locations and should be replaced in its entirety.

Roof

The roof consists of stainless standing seam metal roof panels, which are damaged in multiple locations and appear to be rusting in other locations. This should be replaced in its entirety.
C.19.3  Structure

Foundation
The foundation is reinforced concrete footings and the floor appears to be a gravel floor. These appear to be in good condition. The structural frame consists of steel posts beams roof trusses, steel girts and purlin systems. The structural integrity is intact and appears to be in good condition.

Structural Frame
It appears the ridge cover is missing from the building, which is allowing the elements and animals to get into the structure. The roof should be replaced in its entirety, including ridge cover and fascia. The structure should be repainted with a rust-inhibitive coating.

C.19.4  Interiors

Walls
The interior walls consist of exposed metal and wood. These should be repainted or recoated with waterproof coating.

Floors
Floors consist of a reinforced concrete slab on grade. There has been some patching that has occurred but appears to still be in good condition.

Ceilings
The ceiling is just exposed structure and metal roof panels. The metal roof panels need to be replaced in their entirety, and the existing structure should be repainted with a rust-inhibitive coating.

Doors and Windows
The doors consist of a large overhead sectional door. The door is operational, but should be replaced in its entirety, due to its age. There is a single steel entry door, which is in bad condition and should be replaced in its entirety. There are no windows in this building.

C.19.5  Code Analysis
The building does not meet Life Safety Codes for egress. This building does not meet ADA compliance.

C.19.6  Systems

Fire Protection
Sprinkler
There is no sprinkler system.

Fire Alarm
There is no fire alarm system.

Extinguishers
There are no fire extinguishers.
Electrical

Lighting
There are chain-mounted HID lights in partial working condition. They should be replaced in their entirety with new lighting technologies.

There is no exit or egress lighting. These should be added to meet life safety requirements.

Lighting Controls
The lighting controls consist of wall mounted manual light switches. Cover plates can be replaced if desired.

Service and Distribution
The building appears to have a single 100-amp service with one distribution panel.

Receptacles
There are limited receptacles for the building. If any improvements are made to this building, receptacles should be added.
C.20 Building 1000 – Airport North Storage Hangar

C.20.1 Introduction
The building is located at 2160 West Case Road, Columbus Ohio. The approximate square footage of this building is 4,000 sf. The building was constructed in 1976. The clear floor height for the building is 25’-8” in the center of the bays. The clear height at the hangar doors is 16’-0”. The North Storage Hangar was utilized in 1976. It was originally built for equipment storage and minor maintenance facilities, however, now it is used to store seasonal equipment. The building has a gable roof. Exterior covering is rusted and beginning to deteriorate significantly. There is no heat or plumbing in the structure, and there are limited utilities. The structure remains functional but needs to be repaired if it will continue to be utilized. The overhead garage doors and steel entry door are heavily rusted and in need of replacement. The structural span across the building varies with the largest span being 50’-0”.

This building is in poor condition.

Hangar Doors are 14’-0” x 16’-0”

C.20.2 Exterior

Walls

Exterior walls are standing seam metal siding system. The siding is heavily rusted, and it appears rodents and other animals have begun coming in and out of the building through these areas. These panels need to be replaced in their entirety. The remaining portion of the building should be stripped and repainted.

Roof

The roof is insulated standing seam metal roof system with a waterproof membrane over it. The roof is original to the structure and has rusted through in many locations. It appears the membrane is delaminating in various locations. This roof should be replaced in its entirety. The roof drainage system consists of gutters and downspouts, which empty directly onto the ground at the base of the structure. These downspouts should be diverted away from the structure.
C.20.3 Structure

Foundation
The footing foundation consists of continuous reinforced footings with concrete piers for column support. There is a reinforced concrete slab on grade, which is in fair condition.

Structural Frame
The structural frame is an engineered steel structure with steel posts and steel trusses. There are steel girts and purlin systems. The structure integrity is intact and appears to be in fair condition. Surface rust that appears should be sanded and repainted with a rust-inhibitive coating.

C.20.4 Interiors

Walls
The interior walls of the exterior wall systems are covered in plywood and should be repainted.

Floors
The floors consist of reinforced concrete slab on grade which is in good condition. There are cracks in the floor that do not appear to be structural concerns.

Ceilings
The ceiling consists of exposed insulation and exposed structure. The insulation is damaged and missing in several locations. This should be replaced in its entirety when the roof is replaced. The exposed structure should be repainted and coated with a rust inhibitive coating.

Doors and Windows
The overhead sectional doors are heavily rusted, but functional. These doors should be replaced in their entirety. The steel entry door is also heavily rusted, but functional, and should be replaced in its entirety. There are no windows in this building.

C.20.5 Code Analysis
The structure has multiple means of egress that are in good condition. The man door does not have an exit sign and the hardware should be replaced to meet code requirements. An exit sign should be placed over the door to meet life safety codes. This building is not ADA compliant.

The building does not meet the current energy code for R values for insulation or for roof or wall assembly components. There are no systems provided for this building.

C.20.6 Systems

Fire Protection

Sprinkler
There is no sprinkler system.

Fire Alarm
There is no fire alarm.
Extinguishers
There is no fire protection system. A fire extinguisher should be provided for this facility to meet Life Safety and NFPA requirements.

Electrical
Lighting
The building has wall mounted HID lighting. The lighting needs to be replaced with newer lighting technologies. Many of the lights do not appear to be functional.

Lighting Controls
Lighting controls are wall mounted light switches which appear to be in good condition. Cover plates can be replaced if desired.

Ext Signs and Emergency Egress Lighting
There is no exit sign or emergency egress lighting. These should be installed for Life Safety requirements.

Service and Distribution
There is 100-amp service provided with one distribution panel. The cover is missing from the panel. This should be replaced immediately since this does not meet electrical or building code requirements.

Receptacles
There are minimal wall receptacles provided for this facility. If any improvements are made to this building, additional receptacles should be provided.
C.21 Building 1001 – Airport North Storage Shed

C.21.1 Introduction

The north storage shed is located at 2160 West Case Road, Columbus, Ohio. The approximate area is 600 sf. The building was constructed in 1980. The structural span varies across the building with 24’-0” being the largest span. The clear floor height for the building is 12’-0” at the ridge and the clear floor height at the door is 8’-0”. The clear floor height at the eave is 10’-0”. The north storage shed is a small steel structure with a shallow gable roof. The roof structure is leaking and missing fascia and trim pieces which should be replaced in its entirety. It appears the electrical service and appliances have been abandoned in place. The structure is primarily used for storage. There is an overhead sectional door provided for access. This building is in poor condition.

Sectional door is 16’-4” x 8’-0”

C.21.2 Exterior

Walls

The exterior walls are prefinished standing seam metal siding panels. The finish has begun to fade but is in fair condition.

Roof

The roof is a standing seam metal roof system which has rusted in various locations and is also missing trim and fascia which needs to be replaced. The entire roof should be replaced. The roof drainage system is non-existent. Currently, the water sheds off the roof onto the walls and directly to the ground below adjacent to the footings. It is recommended that downspouts be added if the roof is replaced and divert them away from the building foundation. It appears the ridge cover is missing from the building which is allowing the elements and animals to get into the structure. The roof should be replaced in its entirety, including ridge cover and trim fascia pieces.
C.21.3 Structure

Foundation
The foundation is reinforced concrete footing with a reinforced concrete slab on grade. These appear to be in good condition.

Structural Frame
The structural frame consists of steel posts, beams, roof trusses, steel girts, and purlin systems. The structural integrity is intact and appears to be in good condition.

C.21.4 Interiors

Walls
The interior walls are exposed exterior metal siding system and is covered in painted plywood. The plywood should be repainted. The structure should be repainted with a rust-inhibitive coating.

Floors
Floors consist of a reinforced concrete slab on grade. There has been some patching that has occurred but appears to still be in good condition.

Ceilings
The ceiling is just exposed structure.

Doors and Windows
The building has an overhead aluminum sectional door. It is operational and in fair condition. There is a single steel entry door which is in bad condition and should be replaced in its entirety. There are no windows in this building.

C.21.5 Code Analysis
The building has a means of egress which meet the life safety requirements. The main egress door on the east side is obstructed due to weed growth. This door should be made accessible for egress purposes. Access to this building is not ADA compliant.

C.21. Systems

Fire Protection

Sprinkler
There is no sprinkler system.

Fire Alarm
There is no fire alarm system.

Extinguishers
A fire extinguisher should be provided for this facility to meet Life Safety and NFPA requirements.
Electrical

Lighting

Lighting should be added if improvements are made to this building.

Service and Distribution

Electrical service has been abandoned in place. The electrical service should be reconnected if any significant improvements are made.

Receptacles

There are no receptacles. If any improvements are made to this building, receptacles should be added.
C.22 Building 1014 – T-Hangar B

Source: BCI, 2017
Condition: Excellent

C.22.1 Introduction

T-Hangar B is located at 2160 West Case Road, Columbus, Ohio. The approximate area is 17,200 sf. The building was constructed in 2017. The building has large folding hangar style doors with steel entry doors. The exterior of the building is clad and standing seam metal wall panel systems.

The roof system is standing seam metal roof. The buildings have 14 hangars available for rent. The clear floor height at the ridge is 16'-10" and the clear floor height at the hangar doors is 14'-0".

The hangars have reinforced concrete slab on grade floors. Hangar B does have male and female restrooms provided on the north side of the building. There is a 2-hour fire wall separation in this building located between hangars B11, B12, B4 and B5. These buildings are in excellent condition since they are less than one years old.

The Hangar doors are 42'-0" x 14'-0".

The following is a list of aircraft that were housed in the hangar at the time of the assessment.

<table>
<thead>
<tr>
<th>Hangar</th>
<th>Aircraft Number</th>
</tr>
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<tbody>
<tr>
<td>B1</td>
<td>N26KJ</td>
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<tr>
<td>B2</td>
<td>N824KB</td>
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<tr>
<td>B3</td>
<td>N15677</td>
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<td>B4</td>
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<td>B5</td>
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<td>B9</td>
<td>N527MC</td>
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<td>B10</td>
<td>N4753D</td>
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<td>B11</td>
<td>Empty</td>
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<tr>
<td>B12</td>
<td>Empty</td>
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<td>B13</td>
<td>N3126E</td>
</tr>
<tr>
<td>B14</td>
<td>Empty</td>
</tr>
</tbody>
</table>

C.22.2 Exterior

Walls

The exterior walls are prefinished standing seam metal siding panel systems.

These walls are in excellent condition. There are some areas that have been damages specifically in the hangar doors which should be repaired.

Roof

The roof is a prefinished standing seam metal roof system. There are aluminum gutters and downspouts which drain to PVC downspout boots. These are all in good condition. There are a few locations where the downspouts should be repaired due to some damage.

C.22.3 Structure

Foundation

Foundations consist of continuous reinforced concrete footings with concrete piers at the column locations. The floor is reinforced concrete slab on grade. These areas are in good condition.
Structural Frame

Structural frame consists of a steel building consisting of steel posts, columns and beams, roof trusses with steel girts and purlins. The structure's integrity is intact and in good condition.

C.22.4 Interiors

Walls

The interior walls consist of the painted steel metal siding system. These are in good condition. There are interior walls that are constructed of metal stud framing and painted gypsum board. These are in good condition.

Floors

The floors consist of reinforced concrete slab on grade. Some of these floors have been sealed, others have had broadloom carpet installed in some locations. These are in good condition.

Ceilings

The ceiling is an exposed painted steel structure. There is insulation exposed in the hangars which is in good condition. Restroom ceilings have painted gypsum board ceilings.

Doors and Windows

The doors consist of steel man doors with steel frames. The single man doors are 2’-10” wide x 6’-6” high. The height of the hangar is 14’-4” in the center. The restroom and mechanical rooms have hollow metal doors and frames. These are in good condition. Lever hardware is provided on the restroom and mechanical doors and metal doors. The hangar doors consist of folding steel hangar doors on steel tracks. The hangar doors are 14’ high x 42’ wide. These are in good condition. There are no windows in this building.

C.22.5 Code Analysis

The building has multiple means of egress, which meet life safety requirements. The hangar bays are ADA accessible. The restrooms are also ADA accessible. There is accessible signage provided at the restroom locations. The building does not meet the current energy code for R values for insulation or for roof or wall assembly components.

C.22.6 Systems

Plumbing

Service

There is a 1-1/2-inch water service and meter.

Piping

The piping consists of insulated copper piping and fittings, which are in good condition. Sanitary piping consists of cast iron or PVC piping.

Fixtures

There are floor mounted water closets and wall mounted lavatories. Hot water in the lavatories comes from instantaneous water heating.
Fire Protection

Sprinkler

There is no sprinkler system.

Fire Alarm

There is a fire alarm system with heat detectors in the hangars, pull stations at each end of the building, and exterior lights and horns. These appear to be tested annually. The fire alarm is a Honeywell notifier system.

Extinguishers

Fire extinguishers are provided and appear to be tested annually.

HVAC

System

An electric unit heater is provided in the electric room.

Controls

Building controls consist of built in thermostat with the unit heaters which is operational.

Electrical

Lighting

The structure has compact fluorescent strip fixtures with sensors in the hangar bays. Restrooms have surface mounted compact fluorescent lighting. These lights are in good condition.

Lighting Controls

Lighting controls consist of wall mounted light sensors and switches.

Ext Signs and Emergency Egress Lighting

There is adequate exit egress lighting and exit signage provided.

Service and Distribution

The structure has 120/208 3-phase power. The building is fed from 120/208 single phase distribution panel.

Telecommunications and IT

Adequate phone coverage is provided for the fire alarm system.

Receptacles

Adequate receptacles are provided throughout the building.
C.23 Building 1015 – T-Hangar E

Condition: Excellent
Source: BCI, 2017

C.23.1 Introduction

T-Hangar E is located at 2160 West Case Road, Columbus, Ohio. The approximate area is 19,600 sf. The building was constructed in 2017. The building has large folding hangar style doors with steel entry doors. The exterior of the building is clad and standing seam metal wall panel systems.

The roof system is standing seam metal roof. The buildings have 13 hangars available for rent. The clear floor height at the ridge is 16'-10” and the clear floor height at the hangar doors is 14'-0”.

The hangars have reinforced concrete slab on grade floors. Hangar E has a Mechanical Room with a reinforced concrete slab floor. There is a 2-hour fire wall separation in this building located between hangars. These buildings are in excellent condition since they are less than one years old.

The Hangar doors are 42’-0” x 14’-0”

The following is a list of aircraft that were housed in the hangar at the time of the assessment.

E1 - N731FG        E6 -  N2190K        E11 - N326KB
E2 - N66059        E7 - Empty        E12 - Empty
E3 - N962AC        E8 - Empty        E13 - Empty
E4 - Empty         E9 - Empty
E5 - N18BR         E10 - Empty

C.23.2 Exterior

Walls

The exterior walls are prefinished standing seam metal siding panel systems. These walls are in excellent condition. There are some areas that have been damages specifically in the hangar doors which should be repaired.

Roof

The roof is a prefinished standing seam metal roof system. There are aluminum gutters and downspouts which drain to PVC downspout boots. These are all in good condition. There are a few locations where the downspouts should be repaired due to some damage.

C.23.3 Structure

Foundation

Foundations consist of continuous reinforced concrete footings with concrete piers at the column locations. The floor is reinforced concrete slab on grade. These areas are in good condition.
Structural Frame

Structural frame consists of a steel building consisting of steel posts, columns and beams, and roof trusses with steel girts and purlins. The structure’s integrity is intact and in good condition.

C.23.4 Interiors

Walls

The interior walls consist of the painted steel metal siding system. These are in good condition. There are interior walls that are constructed of metal stud framing and painted gypsum board. These are in good condition.

Floors

The floors consist of reinforced concrete slab on grade. Some of these floors have been sealed, others have had broadloom carpet installed in some locations. These are in good condition.

Ceilings

The building has exposed painted steel structure. There is insulation exposed in the hangars which is in good condition.

Doors and Windows

The doors consist of steel man doors with steel frames. The single man doors are 2’-10” wide x 6’-6” high. The height of the hangar is 14’-4” in the center. The mechanical room has hollow metal doors and frames. These are in good condition. Lever hardware is provided on the mechanical doors and metal doors. The hangar doors consist of folding steel hangar doors on steel tracks. The hangar doors are 14’ high x 42’ wide. These are in good condition. There are no windows in this building.

C.23.5 Code Analysis

The building has multiple means of egress, which meets life safety requirements. The hangar bays are ADA accessible.

The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.23.6 Systems

Fire Protection

Sprinkler

There is no sprinkler system.

Fire Alarm

There is a fire alarm system with heat detectors in the hangars, pull stations at each end of the building, and exterior lights and horns. These appear to be tested annually. The fire alarm is a Honeywell notifier system.

Extinguishers

Fire extinguishers are provided and appear to be tested annually.
HVAC

System
There is unit heater provided in the electric room.

Controls
Building controls consist of built in thermostat with the unit heaters which is operational.

Electrical

Lighting
The structure has compact fluorescent strip fixtures with sensors in the hangar bays.

Lighting Controls
Lighting controls consist of wall mounted light sensors and switches.

Ext Signs and Emergency Egress Lighting
There is adequate exit egress lighting and exit signage provided.

Service and Distribution
The structure has 120/208 3-phase power. The building is fed from 120/208 single phase distribution panel.

Telecommunications and IT
Adequate phone coverage is provided for the fire alarm system.

Receptacles
Adequate receptacles are provided throughout the building.
C.24 Building 1016 – T-Hangar F

Condition: Excellent
Source: BCI, 2017

C.24.1 Introduction

T-Hangar F is located at 2160 West Case Road, Columbus, Ohio. The approximate area is 19,600 sf. The building was constructed in 2017. The building has large folding hangar style doors with steel entry doors. The exterior of the building is clad and standing seam metal wall panel systems.

The roof system is standing seam metal roof. The buildings have 13 hangars available for rent. The clear floor height at the ridge is 16’-10” and the clear floor height at the hangar doors is 14’-0”. The hangars have reinforced concrete slab on grade floors. Hangar F has a Mechanical Room with a reinforced concrete slab floor. There is a 2-hour fire wall separation in this building located between hangars F11, F10, F4 and F5. These buildings are in excellent condition since they are less than one years old.

The Hangar doors are 42’-0” x 14’-0”

The following is a list of aircraft that were housed in the hangar at the time of the assessment.

F1 - N27930  F6 - N700TC  F11 - N42CX
F2 - Empty    F7 - Empty    F12 - Empty
F3 - No N number present F8 - Empty    F13 - Empty
F4 - Empty    F9 - N50885
F5 - N426PS   F10 - N41380

C.24.2 Exterior

Walls

The exterior walls are prefinished standing seam metal siding panel systems. These walls are in excellent condition. There are some areas that have been damaged, particularly parts of the hangar doors, which should be repaired.

Roof

The roof is a prefinished standing seam metal roof system. There are aluminum gutters and downspouts which drain to PVC downspout boots. These are all in good condition. There are a few locations where the downspouts should be repaired due to some damage.

C.24.3 Structure

Foundation

Foundations consist of continuous reinforced concrete footings with concrete piers at the column locations. The floor is reinforced concrete slab on grade. These areas are in good condition.

Structural Frame

Structural frame consists of a steel building consisting of steel posts, columns and beams, and roof trusses with steel girts and purlins. The structure’s integrity is intact and in good condition.
C.24.4  Interiors

Walls
The interior walls consist of the painted steel metal siding system. These are in good condition. There are interior walls that are constructed of metal stud framing and painted gypsum board. These are in good condition.

Floors
The floors consist of reinforced concrete slab on grade. Some of these floors have been sealed, others have had broadloom carpet installed in some locations. These are in good condition.

Ceilings
The building has exposed painted steel structure. There is insulation exposed in the hangars which is in good condition.

Doors and Windows
The doors consist of steel man doors with steel frames. The single man doors are 2’-10” wide x 6’-6” high. The height of the hangar is 14’-4” in the center. The mechanical room has hollow metal doors and frames. These are in good condition. Lever hardware is provided on the mechanical doors and metal doors. The hangar doors consist of folding steel hangar doors on steel tracks. The hangar doors are 14’ high x 42’ wide. These are in good condition. There are no windows in this building.

C.24.5  Code Analysis
The building has multiple means of egress, which meet life safety requirements. The hangar bays are ADA accessible.
The building does not meet the current energy code for R values for insulation, or for roof or wall assembly components.

C.24.6  Systems

Fire Protection

Sprinkler
There is no sprinkler system

Fire Alarm
There is a fire alarm system with heat detectors in the hangars, pull stations at each end of the building, and exterior lights and horns. These appear to be tested annually. The fire alarm is a Honeywell notifier system.

Extinguishers
Fire extinguishers are provided and appear to be tested annually.

HVAC System
There is unit heater provided in the electric room.

Controls
Building controls consist of built in thermostat with the unit heaters which is operational.
Electrical

Lighting
The structure has compact fluorescent strip fixtures with sensors in the hangar bays.

Lighting Controls
Lighting controls consist of wall mounted light sensors and switches.

Ext Signs and Emergency Egress Lighting
There is adequate exit egress lighting and exit signage provided.

Service and Distribution
The structure has 120/208 3-phase power. The building is fed from 120/208 single phase distribution panel.

Telecommunications and IT
Adequate phone coverage is provided for the fire alarm system.

Receptacles
Adequate receptacles are provided throughout the building
C.25 Building 1017 – T-Hangar G

Condition: Excellent
Source: BCI, 2017

C.25.1 Introduction

T-Hangar G is located at 2160 West Case Road, Columbus, Ohio. The approximate area is 17,200 sf. The building was constructed in 2017. The building has large folding hangar style doors with steel entry doors. The exterior of the building is clad and standing seam metal wall panel systems.

The roof system is standing seam metal roof. The buildings have 13 hangars available for rent. The clear floor height at the ridge is 16'-10" and the clear floor height at the hangar doors is 14'-0".

The hangars have reinforced concrete slab on grade floors. Hangar G has a Mechanical Room with a reinforced concrete slab floor. There is a 2-hour fire wall separation in this building located between hangars G11, G12, G4 and G5. These buildings are in excellent condition since they are less than one years old.

The Hangar doors are 42'-0" x 14'-0"

The following is a list of aircraft that were housed in the hangar at the time of the assessment.

Aircraft – 13 Rentable Bays

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<thead>
<tr>
<th>Hangar</th>
<th>Aircraft</th>
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<td>G2</td>
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<td>G3</td>
<td>N5215G</td>
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<td>N72771</td>
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<td>G5</td>
<td>N41AH</td>
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<td>N7145P</td>
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</tbody>
</table>

C.25.2 Exterior

Walls

The exterior walls are prefinished standing seam metal siding panel systems.

These walls are in excellent condition. There are some areas that have been damaged, particularly parts of the hangar doors, which should be repaired.

Roof

The roof is a prefinished standing seam metal roof system. There are aluminum gutters and downspouts, which drain to PVC downspout boots. These are all in good condition. There are a few locations where the downspouts should be repaired due to some damage.

C.25.3 Structure

Foundation

Foundations consist of continuous reinforced concrete footings with concrete piers at the column locations. The floor is reinforced concrete slab on grade. These areas are in good condition.
Structural Frame

Structural frame consists of a steel building consisting of steel posts, columns and beams, and roof trusses with steel girts and purlins. The structure’s integrity is intact and in good condition.

C.25.4 Interiors

Walls

The interior walls consist of the painted steel metal siding system. These are in good condition. There are interior walls that are constructed of metal stud framing and painted gypsum board. These are in good condition.

Floors

The floors consist of reinforced concrete slab on grade. Some of these floors have been sealed, while others have had broadloom carpet installed in some locations. These are in good condition.

Ceilings

The building has exposed painted steel structure. There is insulation exposed in the hangars which is in good condition. Restroom ceilings have painted gypsum board ceilings.

Doors and Windows

The doors consist of steel man doors with steel frames. The single man doors are 2’-10” wide x 6’-6” high. The height of the hangar is 14’-4” in the center. The mechanical room has hollow metal doors and frames. These are in good condition. Lever hardware is provided on the mechanical doors and metal doors. The hangar doors consist of folding steel hangar doors on steel tracks. The hangar doors are 14’ high x 42’ wide. These are in good condition. There are no windows in this building.

HVAC

Building controls consist of built in thermostat with the unit heaters, which are operational.

C.25.5 Code Analysis

The building has multiple means of egress, which meets life safety requirements. The hangar bays are ADA accessible.

The building does not meet the current energy code for R values for insulation or for roof or wall assembly components.

C.25.6 Systems

Fire Protection

Sprinkler

There is no sprinkler system.

Fire Alarm

There is a fire alarm system with heat detectors in the hangars, pull stations at each end of the building, and exterior lights and horns. These appear to be tested annually. The fire alarm is a Honeywell notifier system.

Extinguishers

Fire extinguishers are provided and appear to be tested annually.
HVAC

System
There is unit heater provided in the electric room.

Electrical

Lighting
The structure has compact fluorescent strip fixtures with sensors in the hangar bays.

Lighting Controls
Lighting controls consist of wall mounted light sensors and switches.

Exit Signs and Emergency Egress Lighting
There is adequate exit egress lighting and exit signage provided.

Service and Distribution
The structure has 120/208 3-phase power. The building is fed from 120/208 single phase distribution panel

Telecommunications and IT
Adequate phone coverage is provided for the fire alarm system.

Receptacles
Adequate receptacles are provided throughout the building.
C.26 Building # – Airport Terminal Building

Introduction

Airport Terminal Building is located at 2160 West Case Road, Columbus, Ohio. The new Terminal approximate area is 29,000 sf. The new terminal is currently under construction and will be completed in 2018. The new terminal will include a new aviation education and research facility with state-of-the-art flight simulators, research labs and classrooms, and a modern flight terminal. The new facilities will integrate education with airport operations, benefiting Ohio students as well as Columbus-area residents and visitors. This modern facility will replace the existing general aviation terminal (1,929 square feet, administration building (4,687 square feet); and maintenance building (6,186 square feet).

Exterior

Walls

Roof

Structure

Foundation

Structural Frame

Interiors

Walls

Floors

Ceilings

Doors and Windows

HVAC

Source: Condition: Excellent
C.26.5 Code Analysis

C.25.6 Systems

Fire Protection

Sprinkler

Fire Alarm

Extinguishers

HVAC

System

Distribution

Piping

Exhaust

Electrical

Lighting

Lighting Controls

Exit Signs and Emergency Egress Lighting

Service and Distribution

Telecommunications and IT

Receptacles