Sectional Map for ASN 2016-WTE-1651-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1652-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T149
Location:	Roundhead, OH
Latitude:	40-32-28.31N NAD 83
Longitude:	83-44-45.53W
Heights:	1072 feet site elevation (SE) 492 feet above ground level (AGL) 1564 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1652-OE.

Signature Control No: 284651989-300833688 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
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2016-WTE-1602-OE / 23 ft.
2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
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2016-WTE-1673-OE / 46 ft.
2016-WTE-1674-OE / 185 ft.
2016-WTE-1675-OE / 174 ft.
2016-WTE-1677-OE / 177 ft.
2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

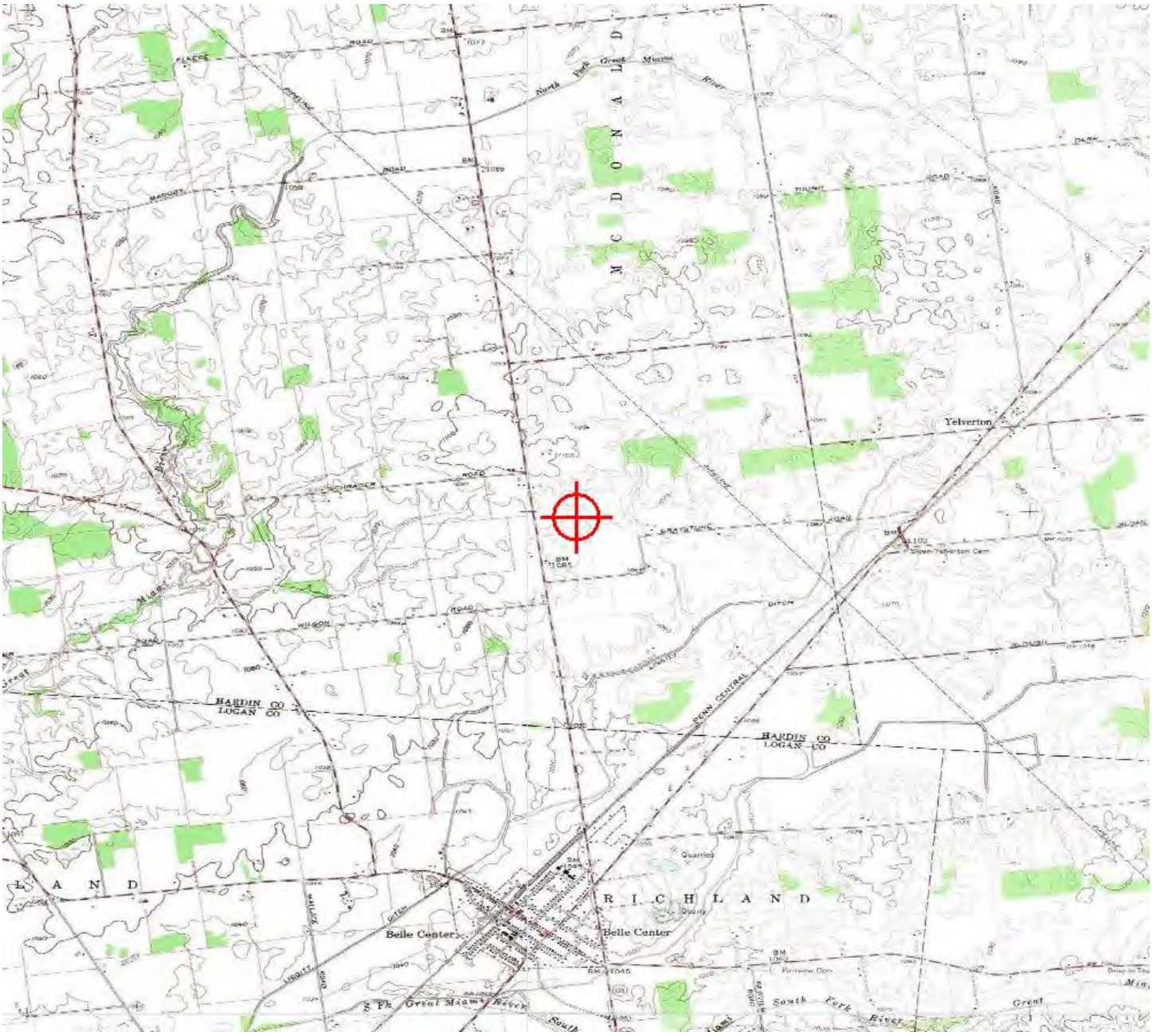
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1652-OE



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Structure:	Wind Turbine T150
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Latitude:	40-34-27.38N NAD 83
Longitude:	83-44-44.11W
Heights:	1067 feet site elevation (SE) 492 feet above ground level (AGL) 1559 feet above mean sea level (AMSL)

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Manager, Obstruction Evaluation Group

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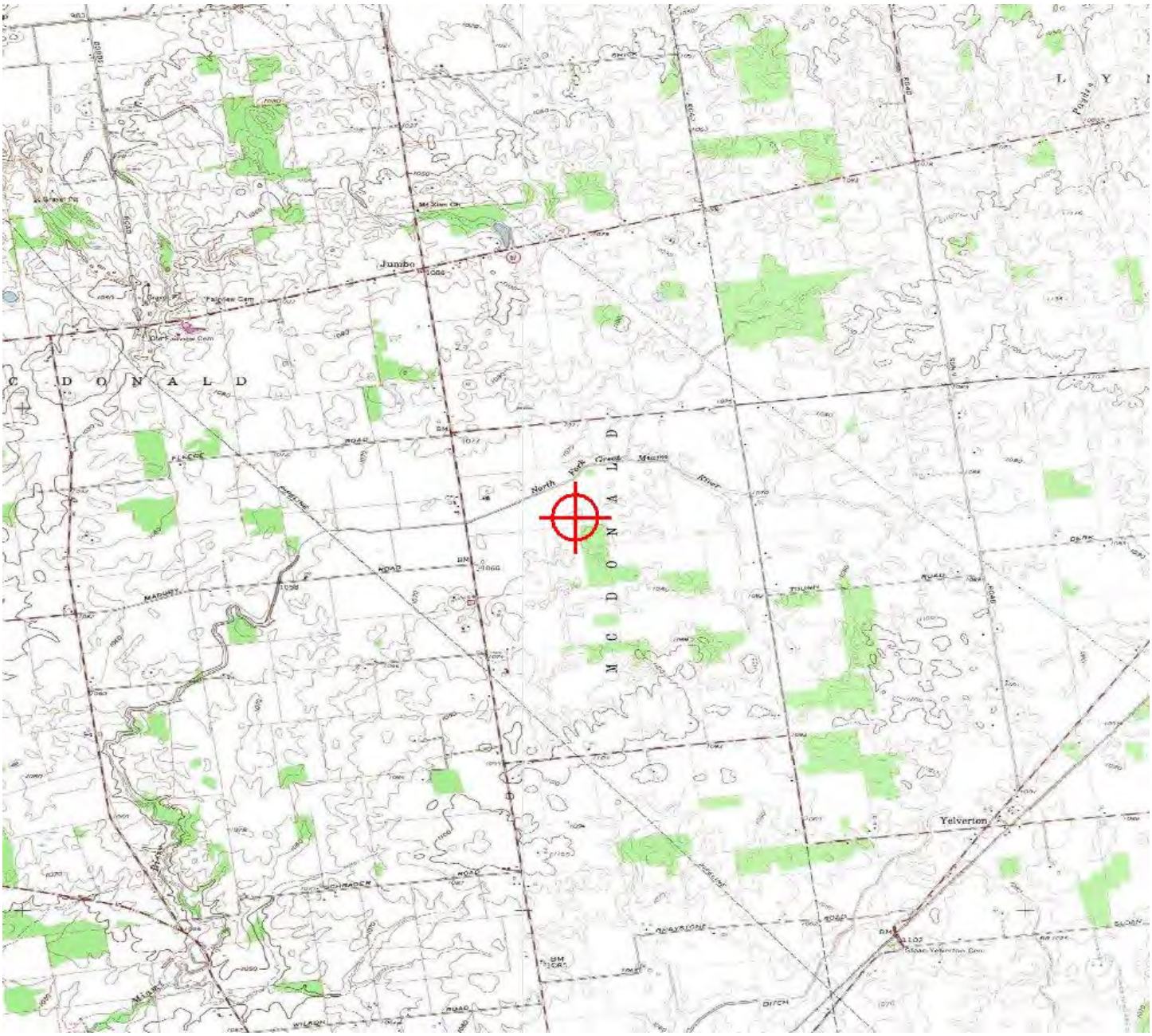

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1654-OE.

Signature Control No: 284651991-300833694 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
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2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

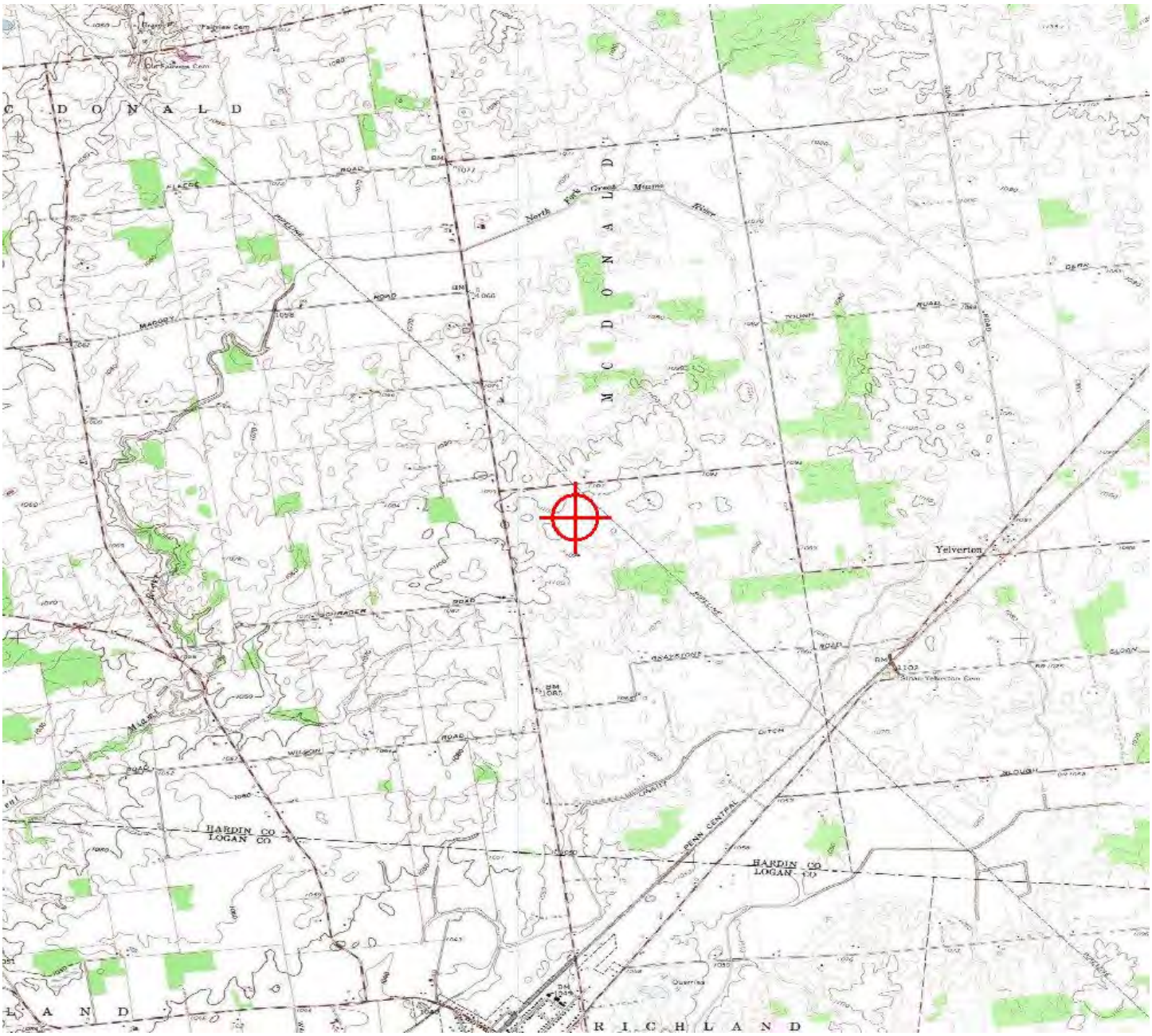
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1654-OE



Sectional Map for ASN 2016-WTE-1654-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1655-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T152
Location:	Roundhead, OH
Latitude:	40-34-00.14N NAD 83
Longitude:	83-44-41.59W
Heights:	1082 feet site elevation (SE) 492 feet above ground level (AGL) 1574 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1655-OE.

Signature Control No: 284651992-300833701 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
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Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

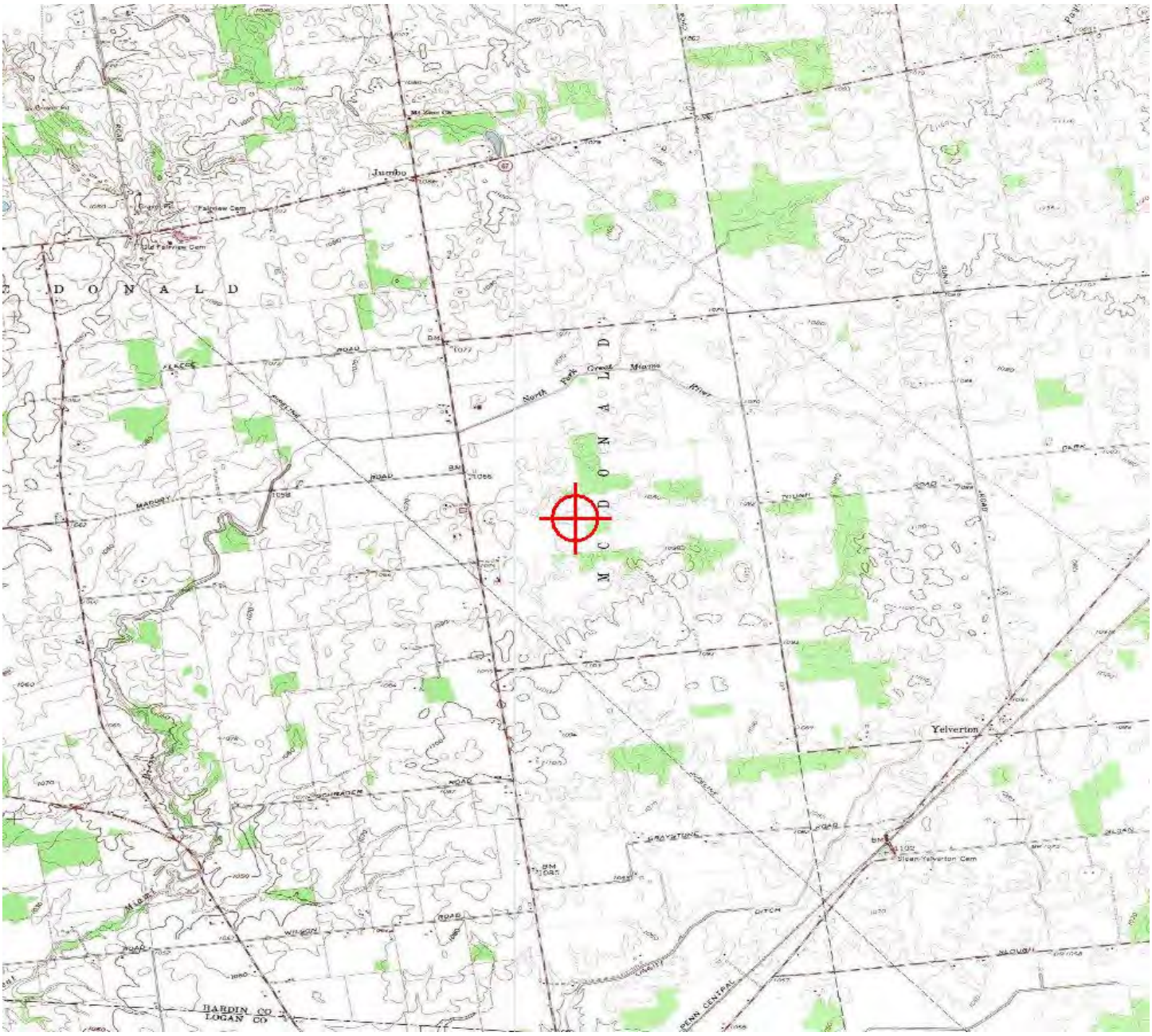
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1655-OE



Sectional Map for ASN 2016-WTE-1655-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1656-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T154
Location:	Roundhead, OH
Latitude:	40-33-35.35N NAD 83
Longitude:	83-44-39.18W
Heights:	1090 feet site elevation (SE) 492 feet above ground level (AGL) 1582 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1656-OE.

Signature Control No: 284651993-300833707 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

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IFR - instrument flight rules
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

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Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

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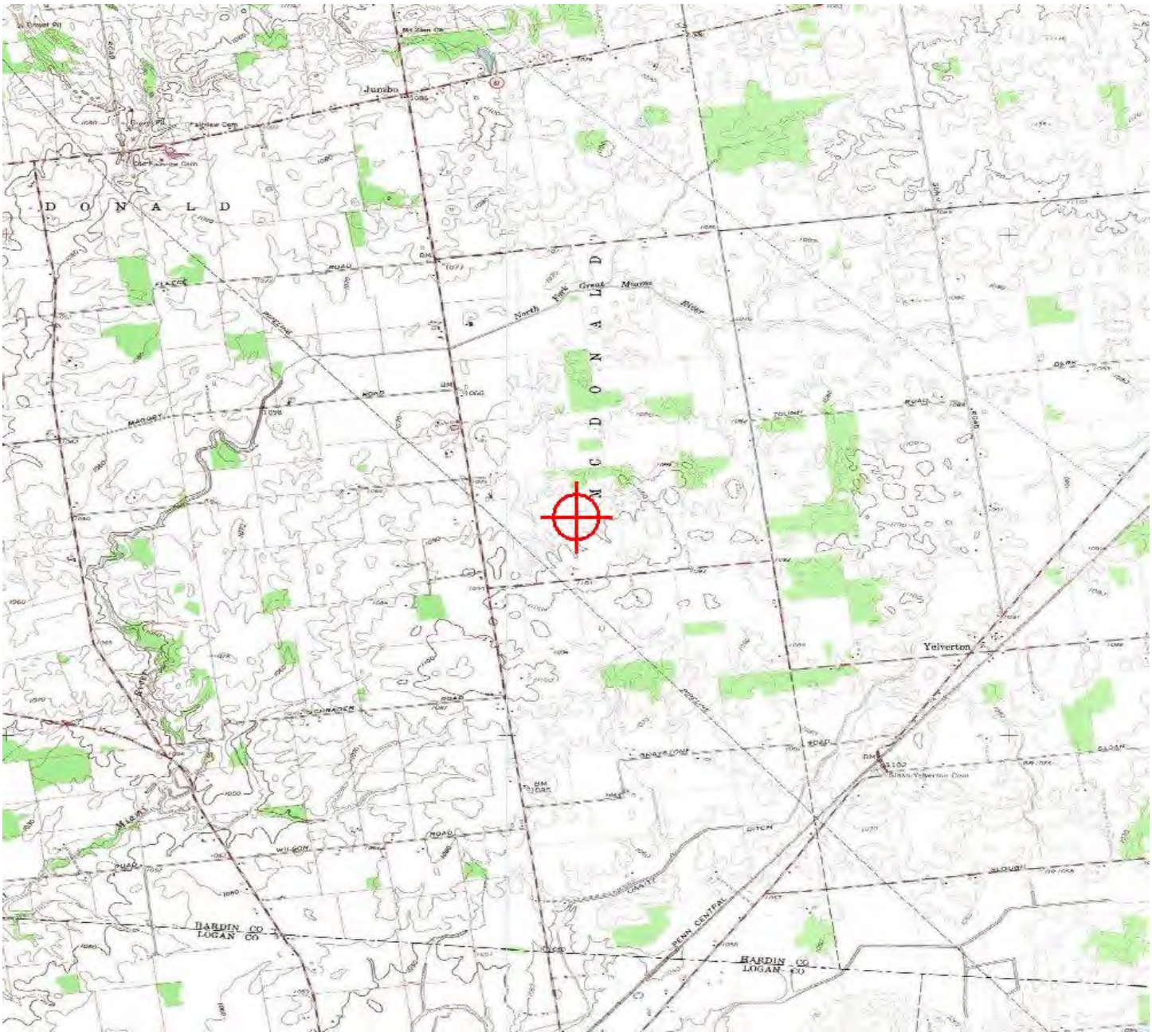
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1656-OE



Sectional Map for ASN 2016-WTE-1656-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1657-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T155
Location:	Roundhead, OH
Latitude:	40-35-17.62N NAD 83
Longitude:	83-44-41.02W
Heights:	1086 feet site elevation (SE)
	492 feet above ground level (AGL)
	1578 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1657-OE.

Signature Control No: 284651994-300833715 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
2016-WTE-1602-OE / 23 ft.
2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
2016-WTE-1641-OE / 7 ft.
2016-WTE-1644-OE / 27 ft.
2016-WTE-1648-OE / 60 ft.
2016-WTE-1649-OE / 71 ft.
2016-WTE-1650-OE / 72 ft.
2016-WTE-1651-OE / 89 ft.
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2016-WTE-1655-OE / 64 ft.
2016-WTE-1656-OE / 45 ft.
2016-WTE-1657-OE / 115 ft.
2016-WTE-1658-OE / 13 ft.
2016-WTE-1660-OE / 108 ft.
2016-WTE-1661-OE / 76 ft.

2016-WTE-1662-OE / 116 ft.
2016-WTE-1665-OE / 87 ft.
2016-WTE-1666-OE / 126 ft.
2016-WTE-1668-OE / 40 ft.
2016-WTE-1670-OE / 34 ft.
2016-WTE-1673-OE / 46 ft.
2016-WTE-1674-OE / 185 ft.
2016-WTE-1675-OE / 174 ft.
2016-WTE-1677-OE / 177 ft.
2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

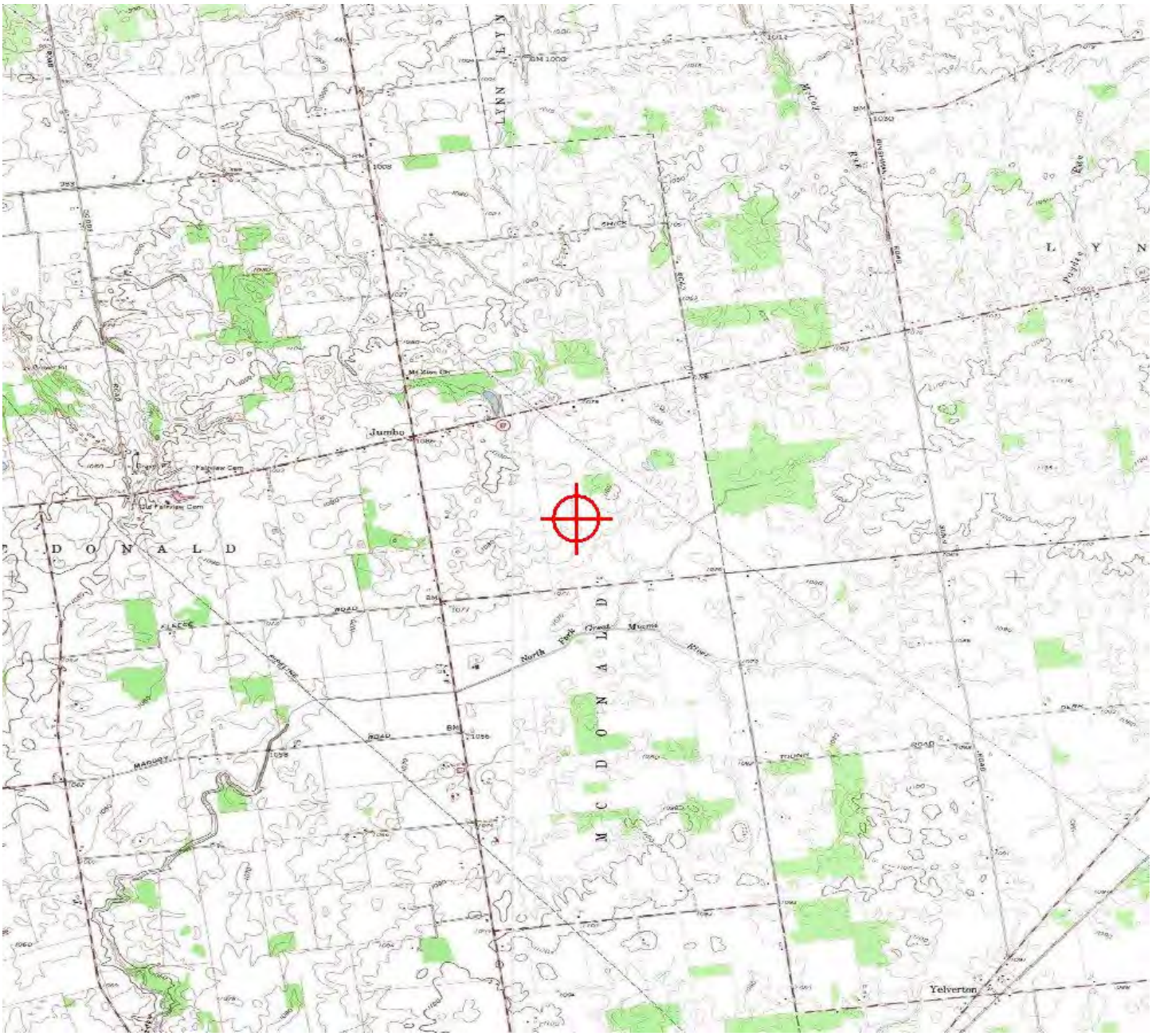
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1657-OE



Sectional Map for ASN 2016-WTE-1657-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1658-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T158
Location:	Roundhead, OH
Latitude:	40-32-57.01N NAD 83
Longitude:	83-44-33.15W
Heights:	1085 feet site elevation (SE) 492 feet above ground level (AGL) 1577 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1658-OE.

Signature Control No: 284651995-300833727 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
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2016-WTE-1602-OE / 23 ft.
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2016-WTE-1656-OE / 45 ft.
2016-WTE-1657-OE / 115 ft.
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2016-WTE-1661-OE / 76 ft.

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2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

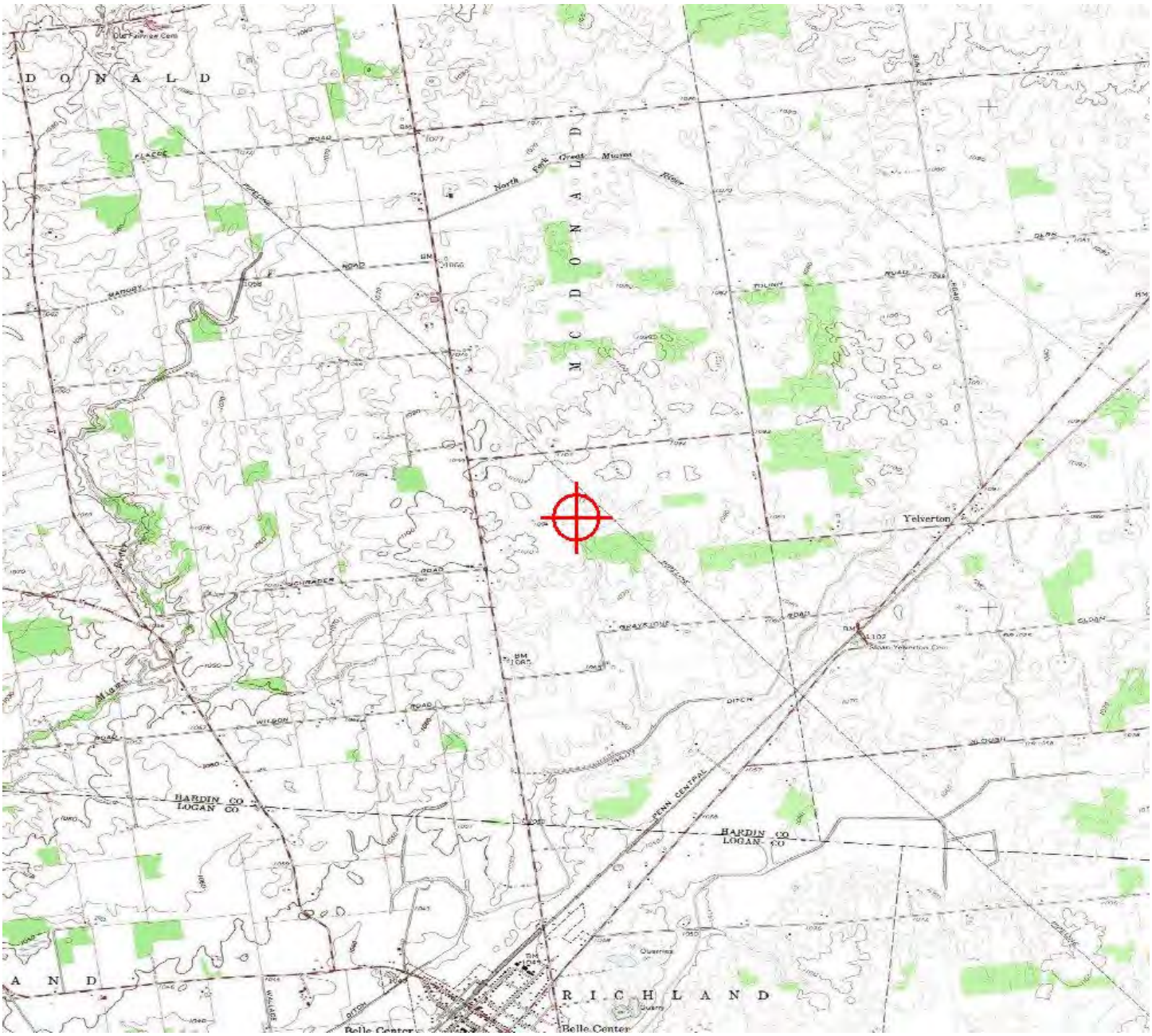
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1658-OE



Sectional Map for ASN 2016-WTE-1658-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1659-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T159
Location:	Roundhead, OH
Latitude:	40-31-57.61N NAD 83
Longitude:	83-44-30.25W
Heights:	1062 feet site elevation (SE) 492 feet above ground level (AGL) 1554 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

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(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1659-OE.

Signature Control No: 284651996-300833738 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
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2016-WTE-1657-OE / 115 ft.
2016-WTE-1658-OE / 13 ft.
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2016-WTE-1661-OE / 76 ft.

2016-WTE-1662-OE / 116 ft.
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2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

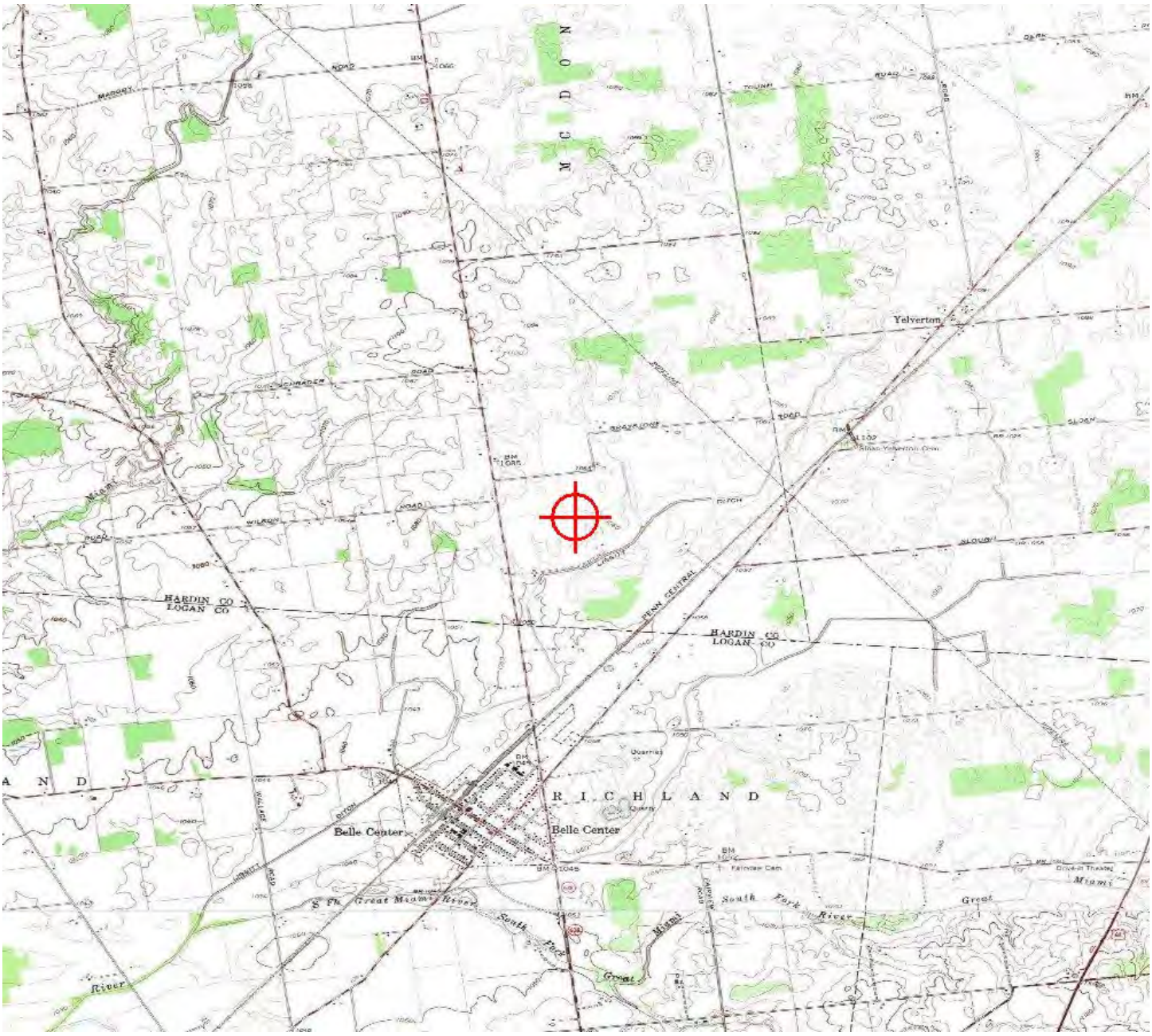
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1659-OE



Sectional Map for ASN 2016-WTE-1659-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1661-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T162
Location:	Roundhead, OH
Latitude:	40-33-53.58N NAD 83
Longitude:	83-44-25.34W
Heights:	1084 feet site elevation (SE) 492 feet above ground level (AGL) 1576 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1661-OE.

Signature Control No: 284651998-300833792 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
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2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

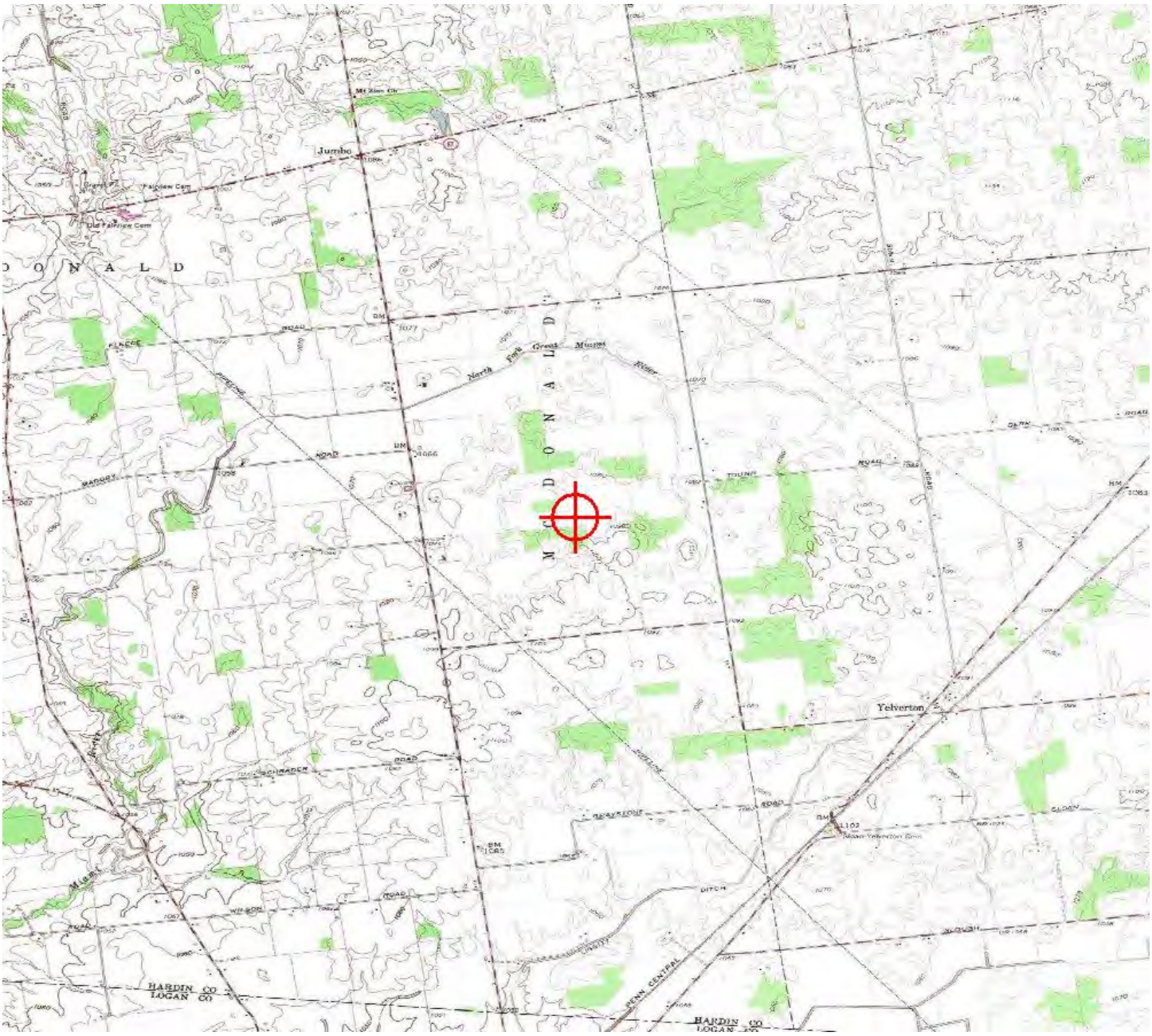
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1661-OE



Sectional Map for ASN 2016-WTE-1661-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1684-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T163
Location:	Roundhead, OH
Latitude:	40-29-50.26N NAD 83
Longitude:	83-44-10.20W
Heights:	1060 feet site elevation (SE) 492 feet above ground level (AGL) 1552 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1684-OE.

Signature Control No: 284652022-300833867 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

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2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

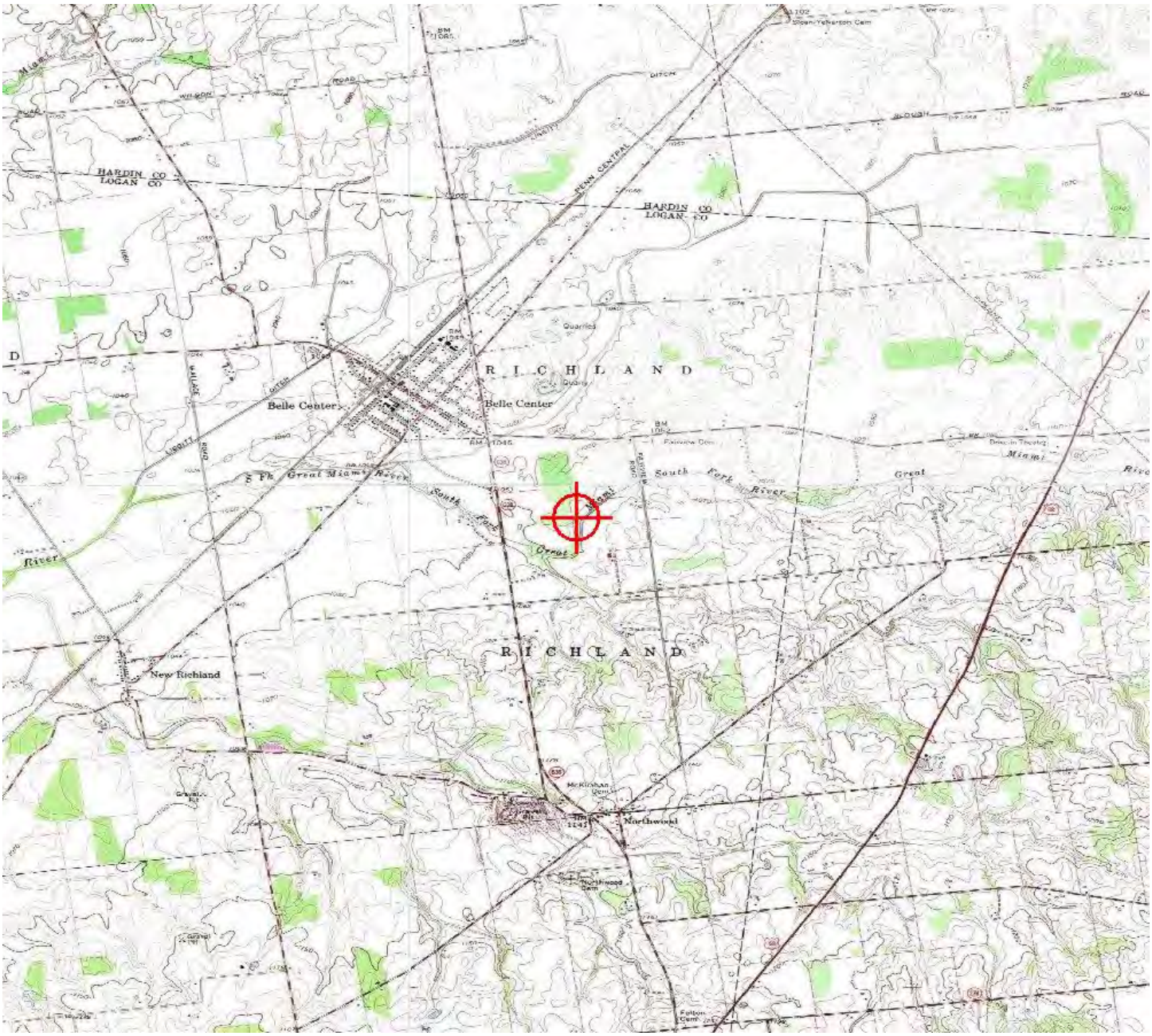
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1684-OE



Sectional Map for ASN 2016-WTE-1684-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1662-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T164
Location:	Roundhead, OH
Latitude:	40-34-32.59N NAD 83
Longitude:	83-44-17.15W
Heights:	1068 feet site elevation (SE) 492 feet above ground level (AGL) 1560 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1662-OE.

Signature Control No: 284651999-300833795 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
2016-WTE-1602-OE / 23 ft.
2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
2016-WTE-1641-OE / 7 ft.
2016-WTE-1644-OE / 27 ft.
2016-WTE-1648-OE / 60 ft.
2016-WTE-1649-OE / 71 ft.
2016-WTE-1650-OE / 72 ft.
2016-WTE-1651-OE / 89 ft.
2016-WTE-1653-OE / 82 ft.
2016-WTE-1654-OE / 13 ft.
2016-WTE-1655-OE / 64 ft.
2016-WTE-1656-OE / 45 ft.
2016-WTE-1657-OE / 115 ft.
2016-WTE-1658-OE / 13 ft.
2016-WTE-1660-OE / 108 ft.
2016-WTE-1661-OE / 76 ft.

2016-WTE-1662-OE / 116 ft.
2016-WTE-1665-OE / 87 ft.
2016-WTE-1666-OE / 126 ft.
2016-WTE-1668-OE / 40 ft.
2016-WTE-1670-OE / 34 ft.
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2016-WTE-1674-OE / 185 ft.
2016-WTE-1675-OE / 174 ft.
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2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
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2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

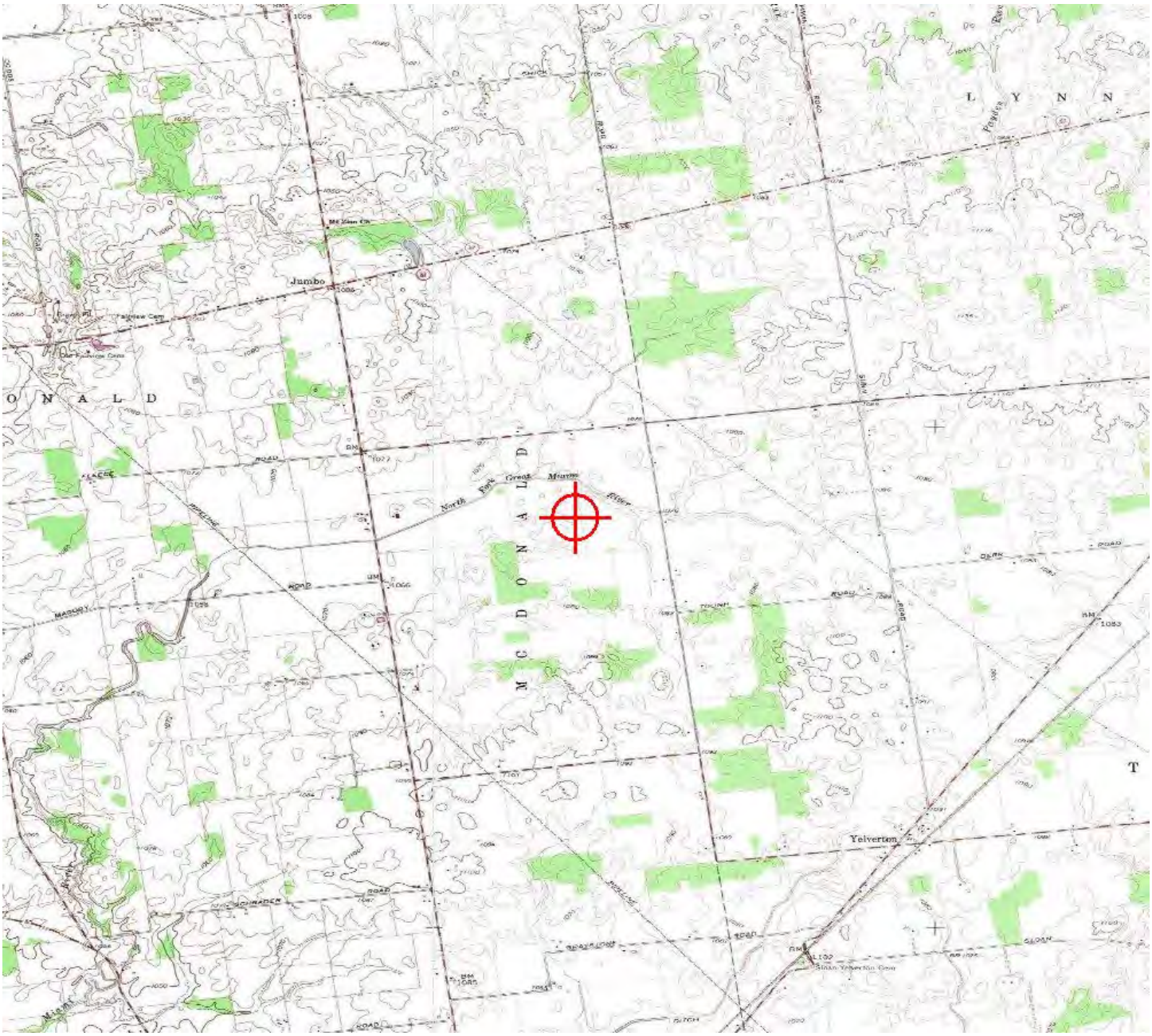
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1662-OE



Sectional Map for ASN 2016-WTE-1662-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1663-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T165
Location:	Roundhead, OH
Latitude:	40-31-52.86N NAD 83
Longitude:	83-44-01.97W
Heights:	1055 feet site elevation (SE) 492 feet above ground level (AGL) 1547 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1663-OE.

Signature Control No: 284652000-300833798 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
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IFR - instrument flight rules
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MOCA - minimum obstruction clearance altitude
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

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The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

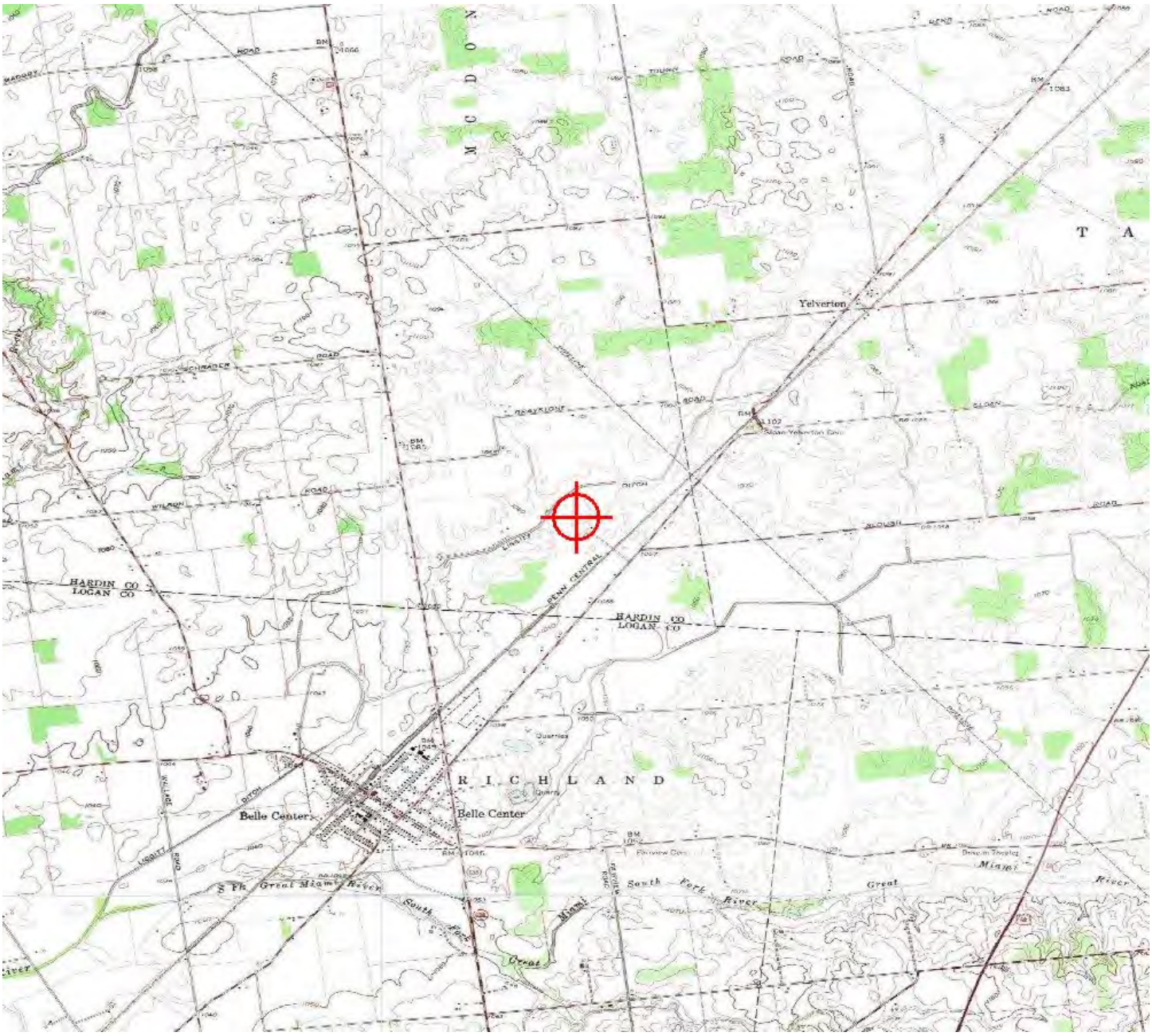
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

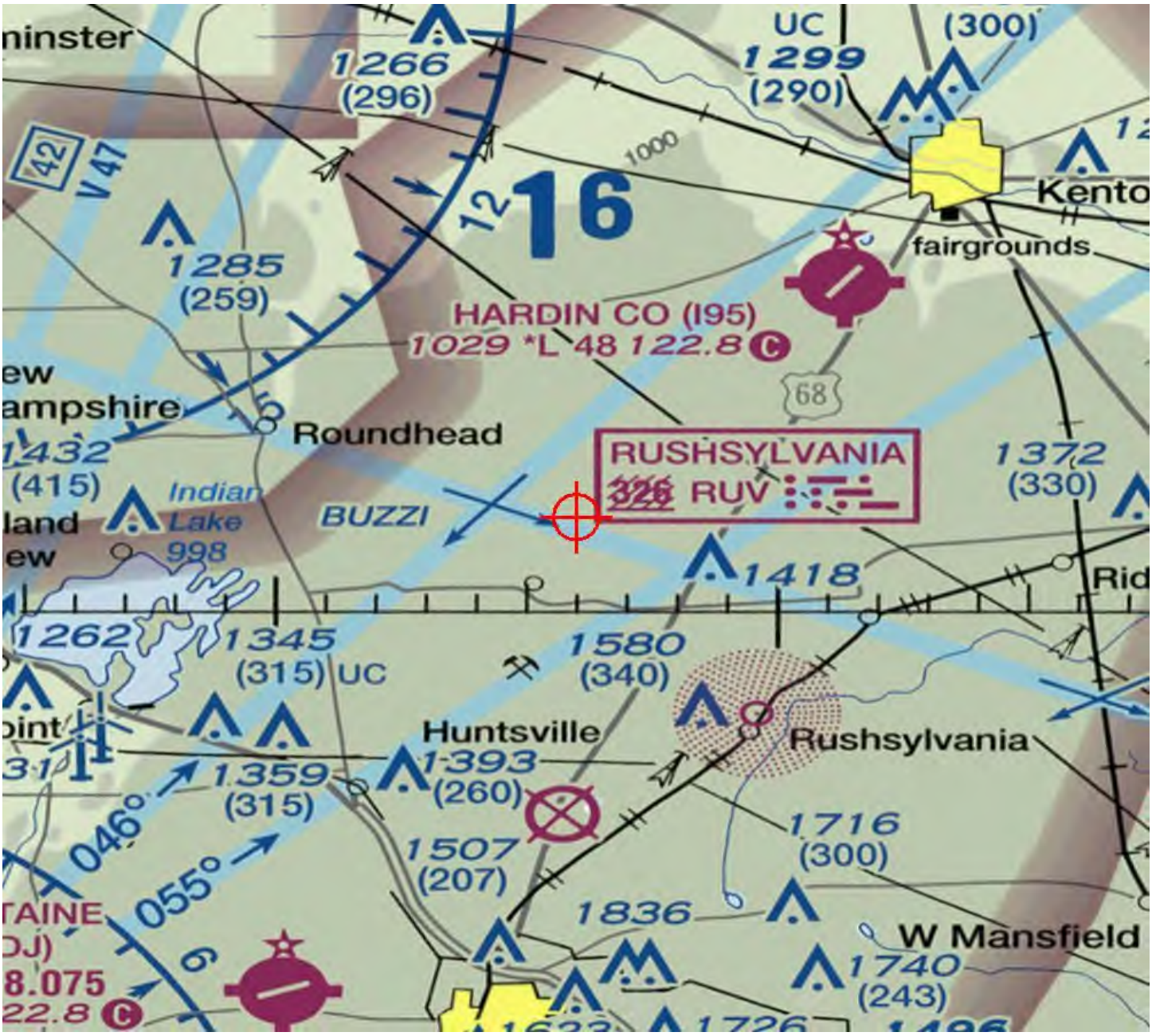
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1663-OE



Sectional Map for ASN 2016-WTE-1663-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1685-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T166
Location:	Roundhead, OH
Latitude:	40-30-42.23N NAD 83
Longitude:	83-44-04.96W
Heights:	1044 feet site elevation (SE) 492 feet above ground level (AGL) 1536 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

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This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1685-OE.

Signature Control No: 284652023-300833873 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
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Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

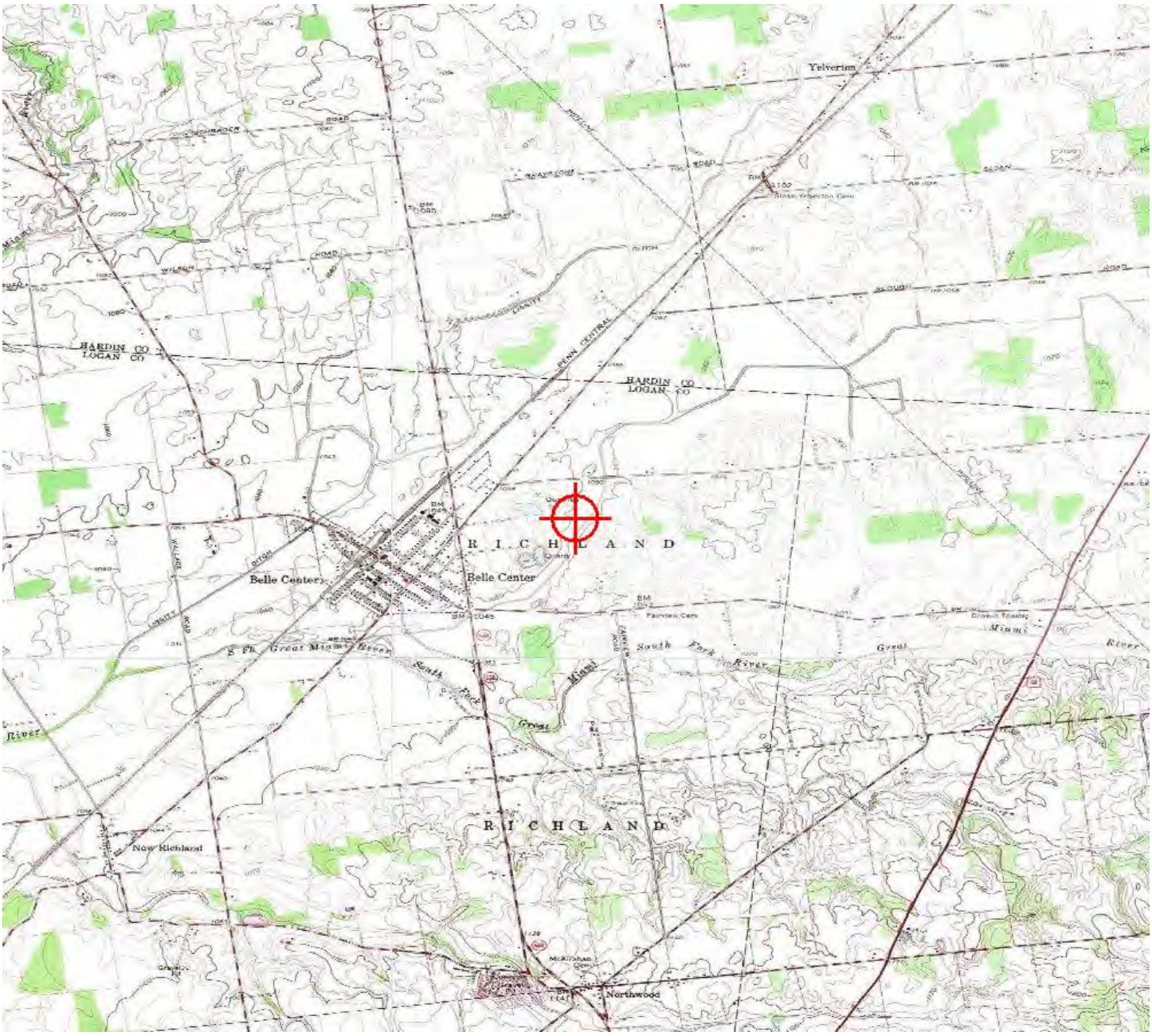
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

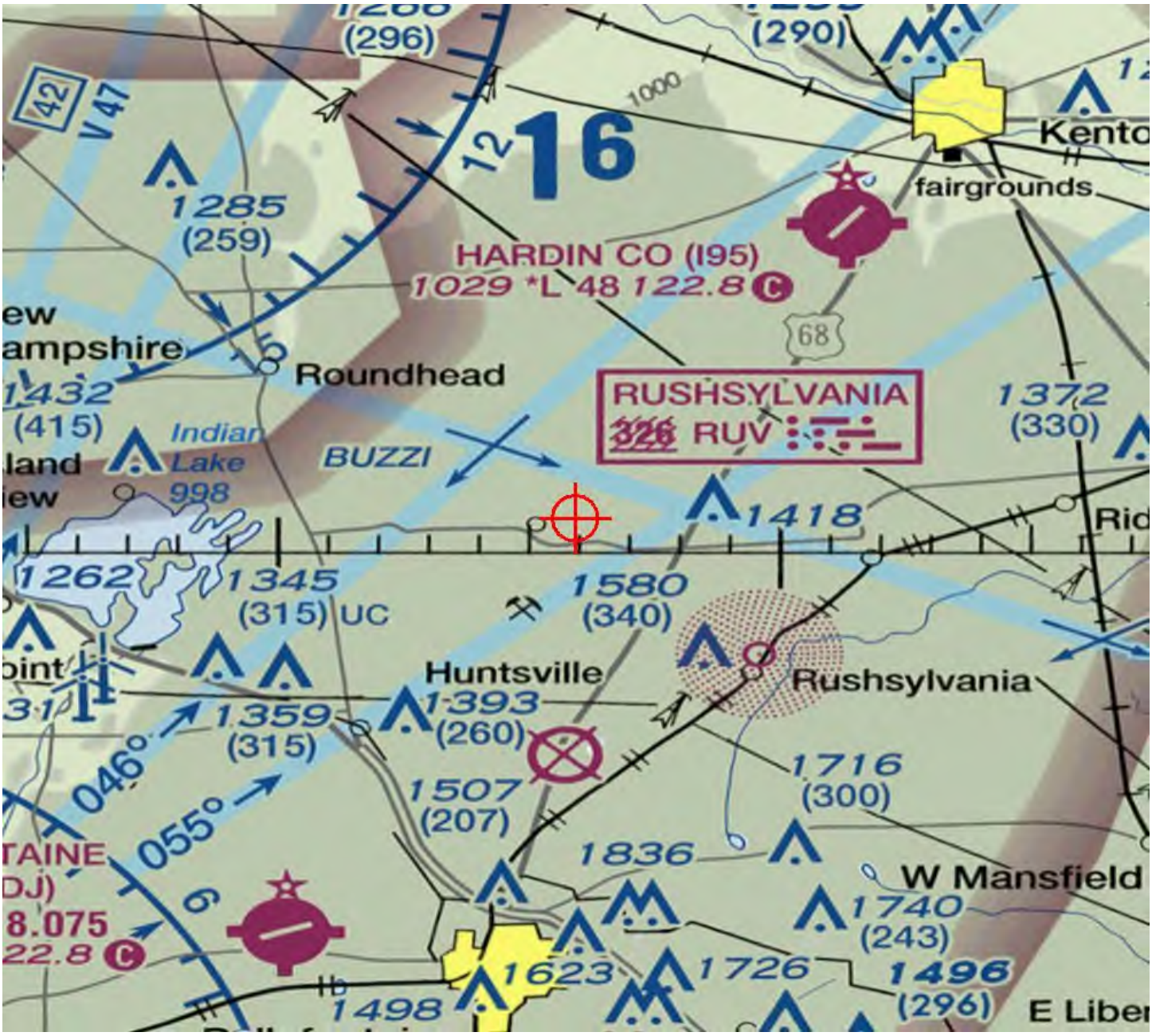
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1685-OE



Sectional Map for ASN 2016-WTE-1685-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1664-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T167
Location:	Roundhead, OH
Latitude:	40-32-16.94N NAD 83
Longitude:	83-44-03.97W
Heights:	1065 feet site elevation (SE)
	492 feet above ground level (AGL)
	1557 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1664-OE.

Signature Control No: 284652001-300833802 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

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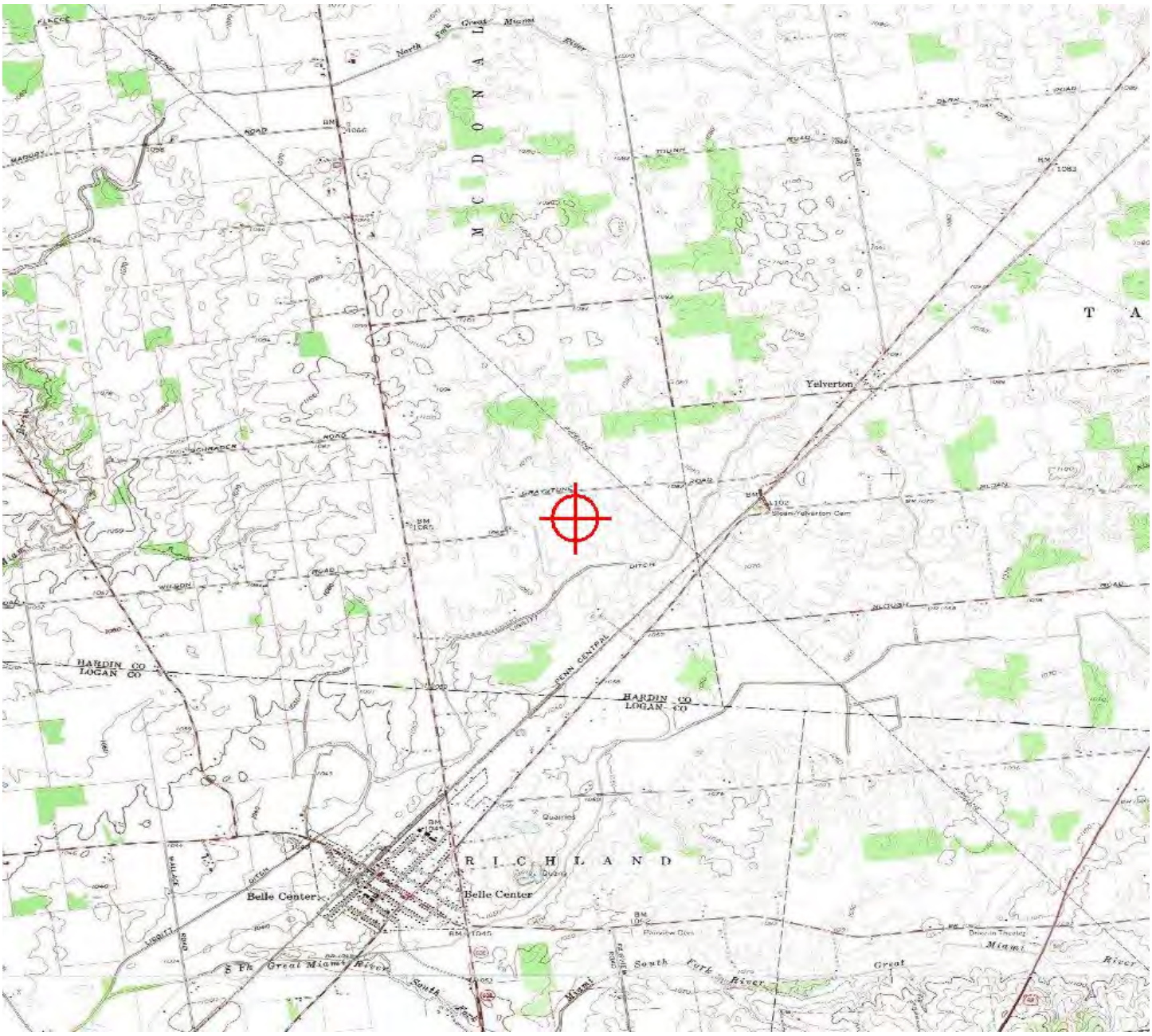
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1664-OE



Sectional Map for ASN 2016-WTE-1664-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1665-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T168
Location:	Roundhead, OH
Latitude:	40-33-46.45N NAD 83
Longitude:	83-44-09.10W
Heights:	1095 feet site elevation (SE) 492 feet above ground level (AGL) 1587 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

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See attachment for additional condition(s) or information.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1665-OE.

Signature Control No: 284652002-300833805 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

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OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
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Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

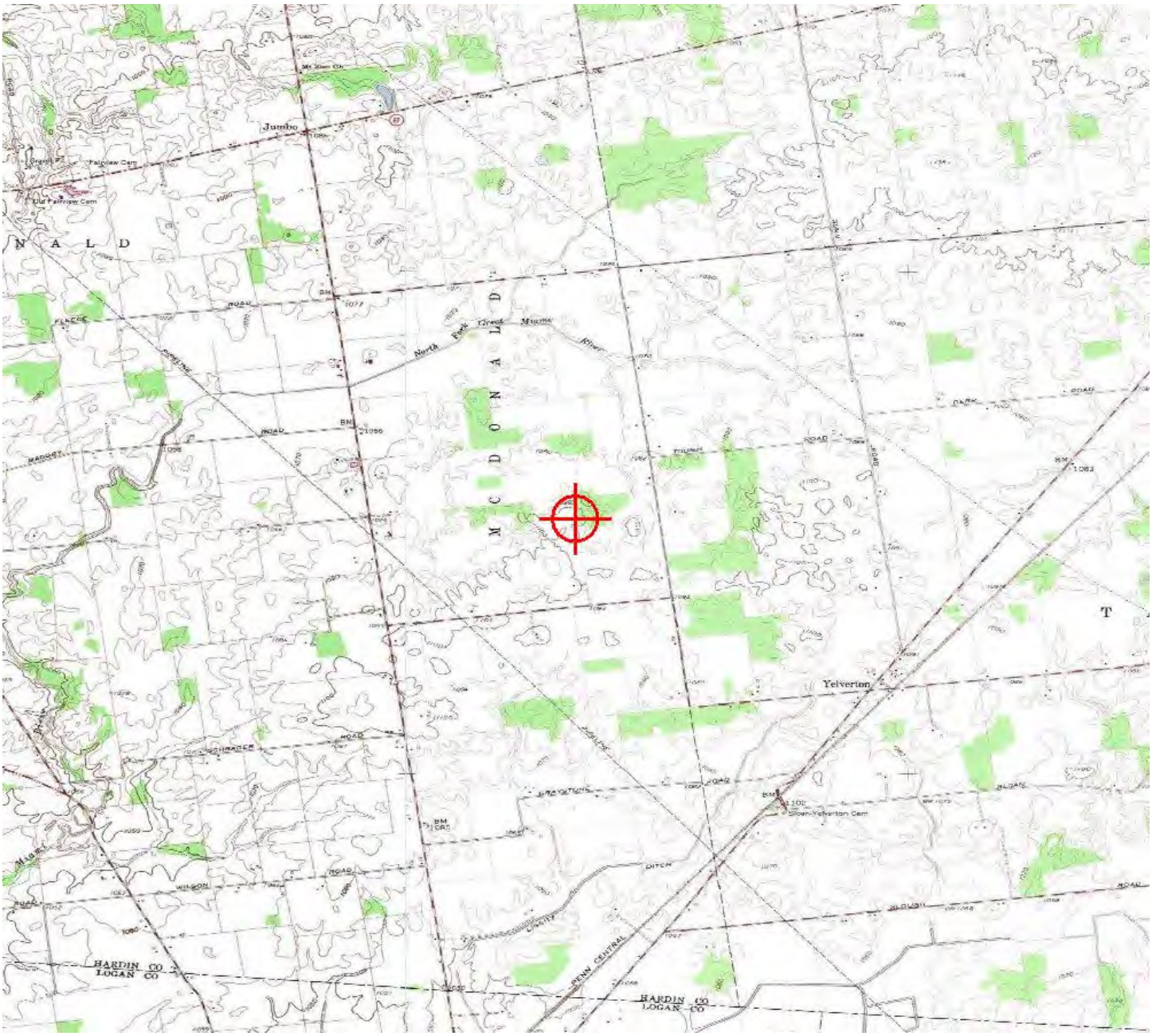
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1665-OE



Sectional Map for ASN 2016-WTE-1665-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1666-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T169
Location:	Roundhead, OH
Latitude:	40-34-45.62N NAD 83
Longitude:	83-44-16.19W
Heights:	1065 feet site elevation (SE)
	492 feet above ground level (AGL)
	1557 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1666-OE.

Signature Control No: 284652003-300833807 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
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Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

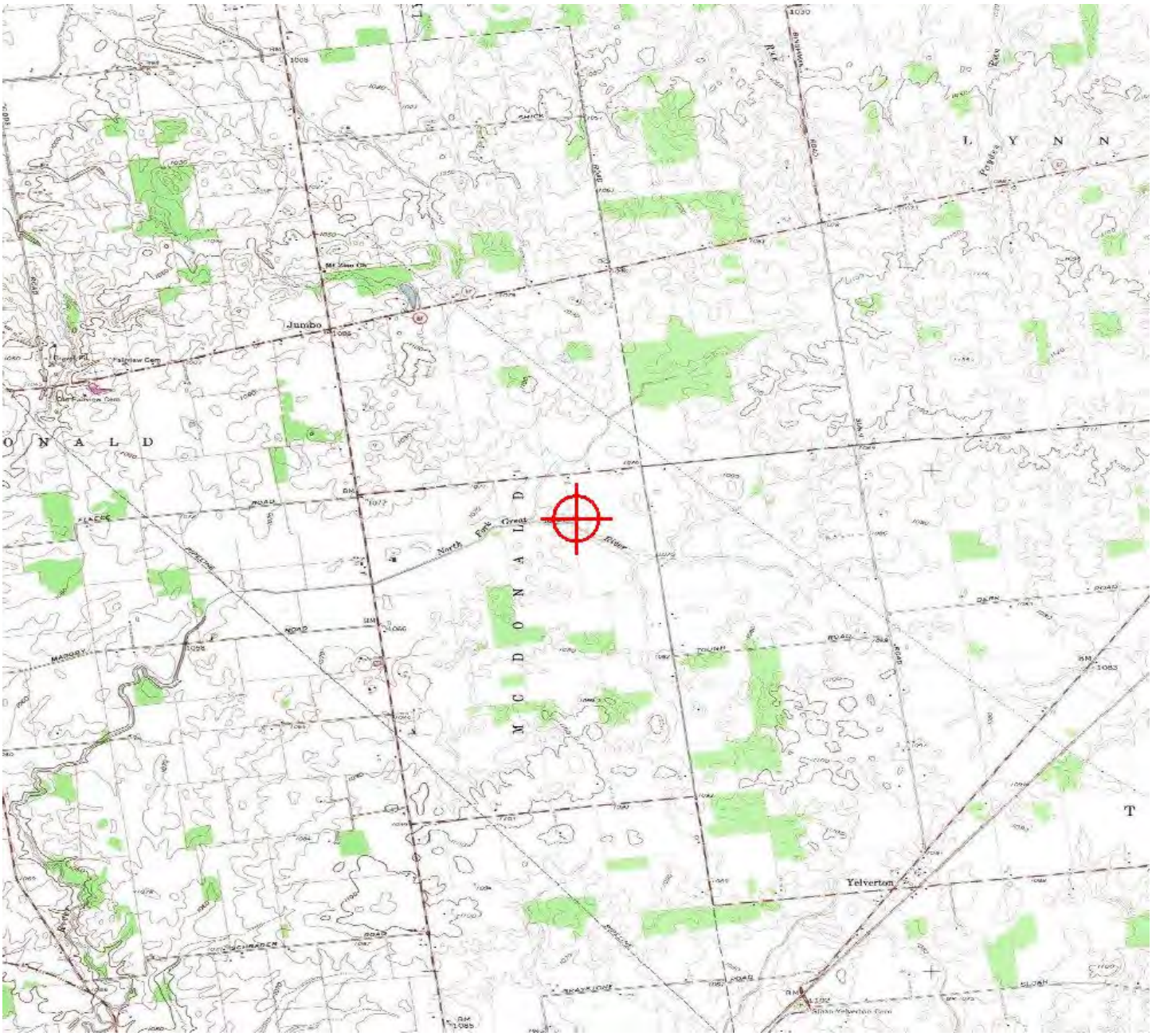
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

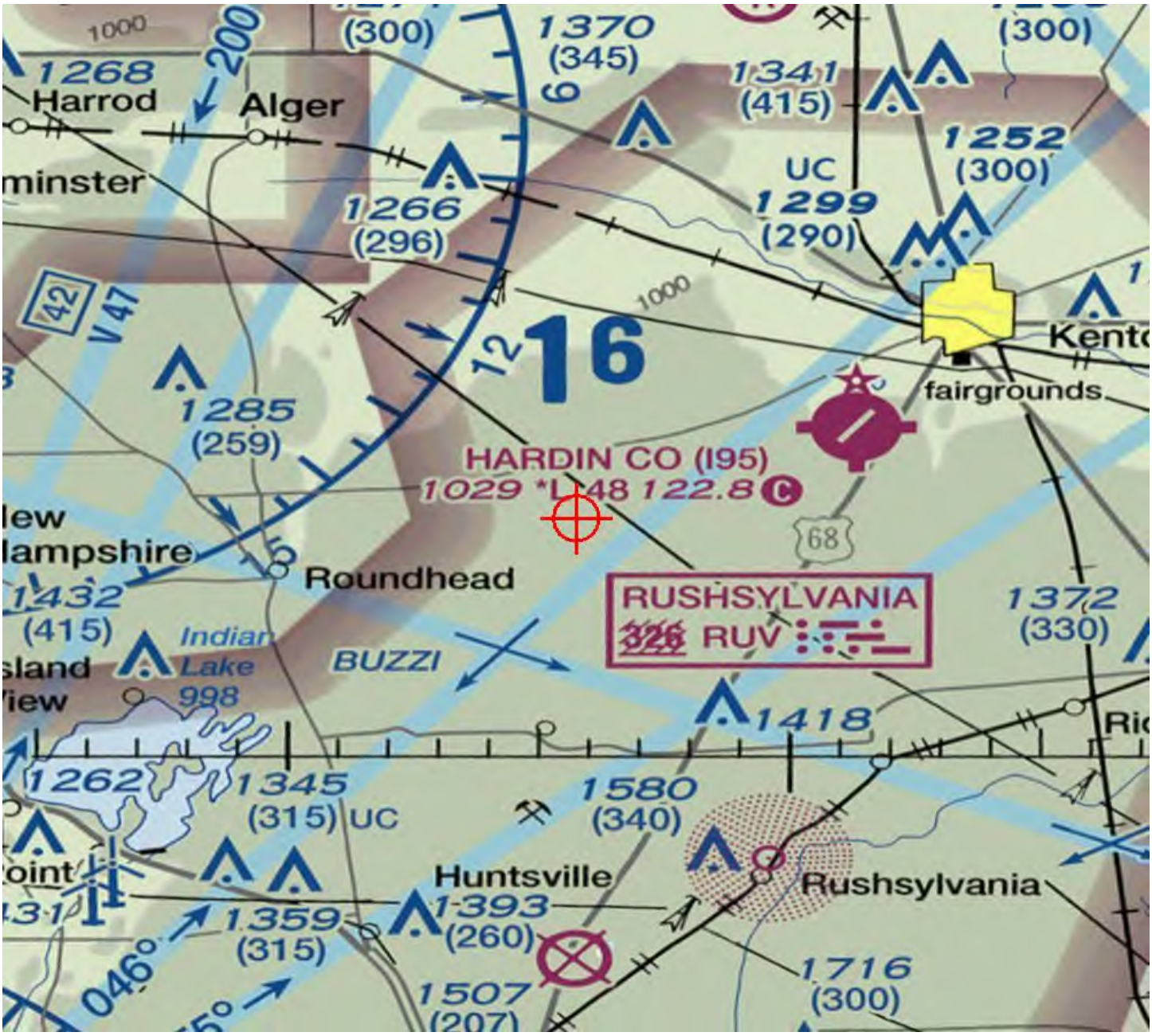
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1666-OE



Sectional Map for ASN 2016-WTE-1666-OE



Mail Processing Center
Federal Aviation Administration
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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1667-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T170
Location:	Roundhead, OH
Latitude:	40-31-42.12N NAD 83
Longitude:	83-44-01.11W
Heights:	1053 feet site elevation (SE) 492 feet above ground level (AGL) 1545 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

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See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

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Signature Control No: 284652004-300833812 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

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The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

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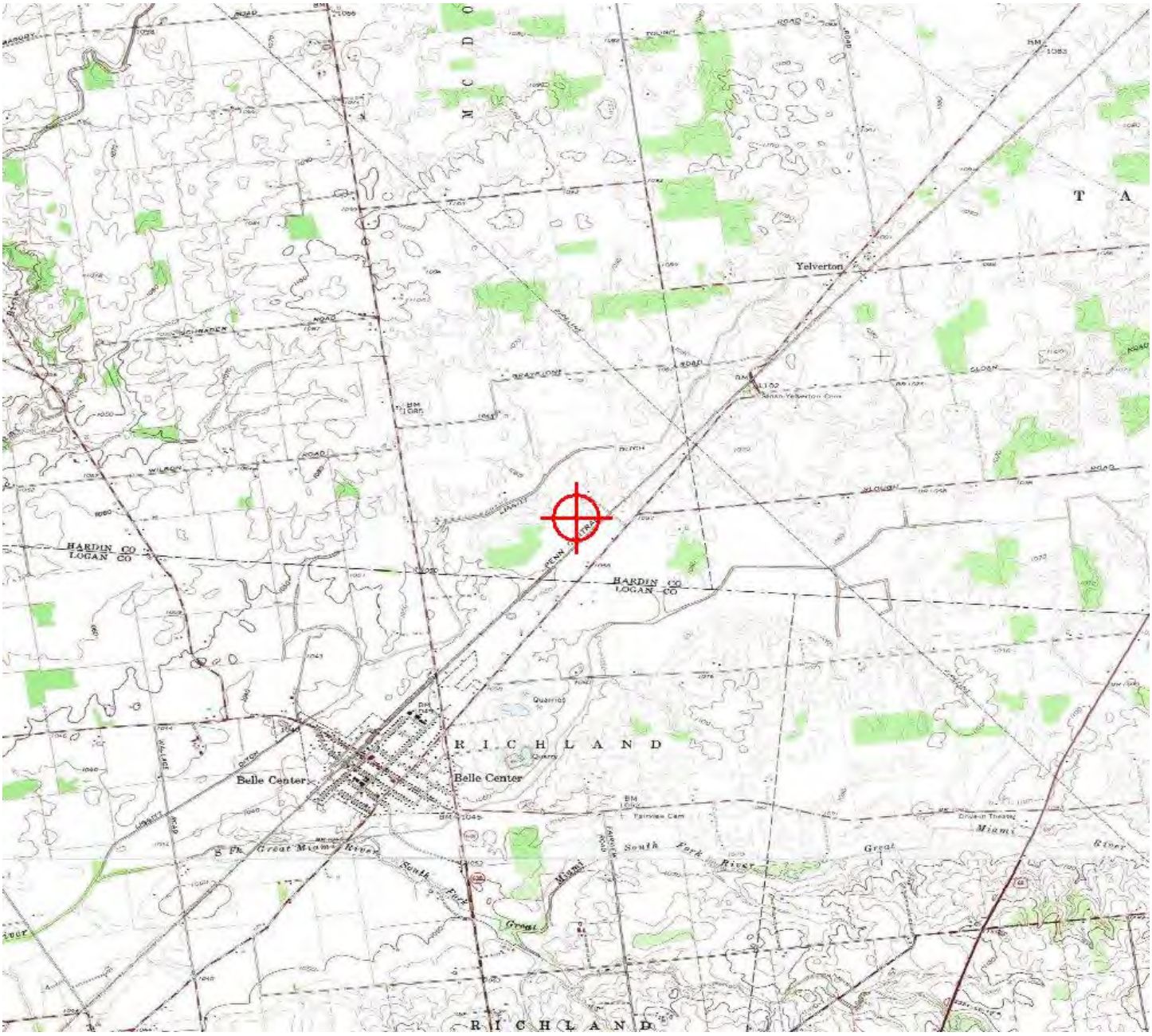
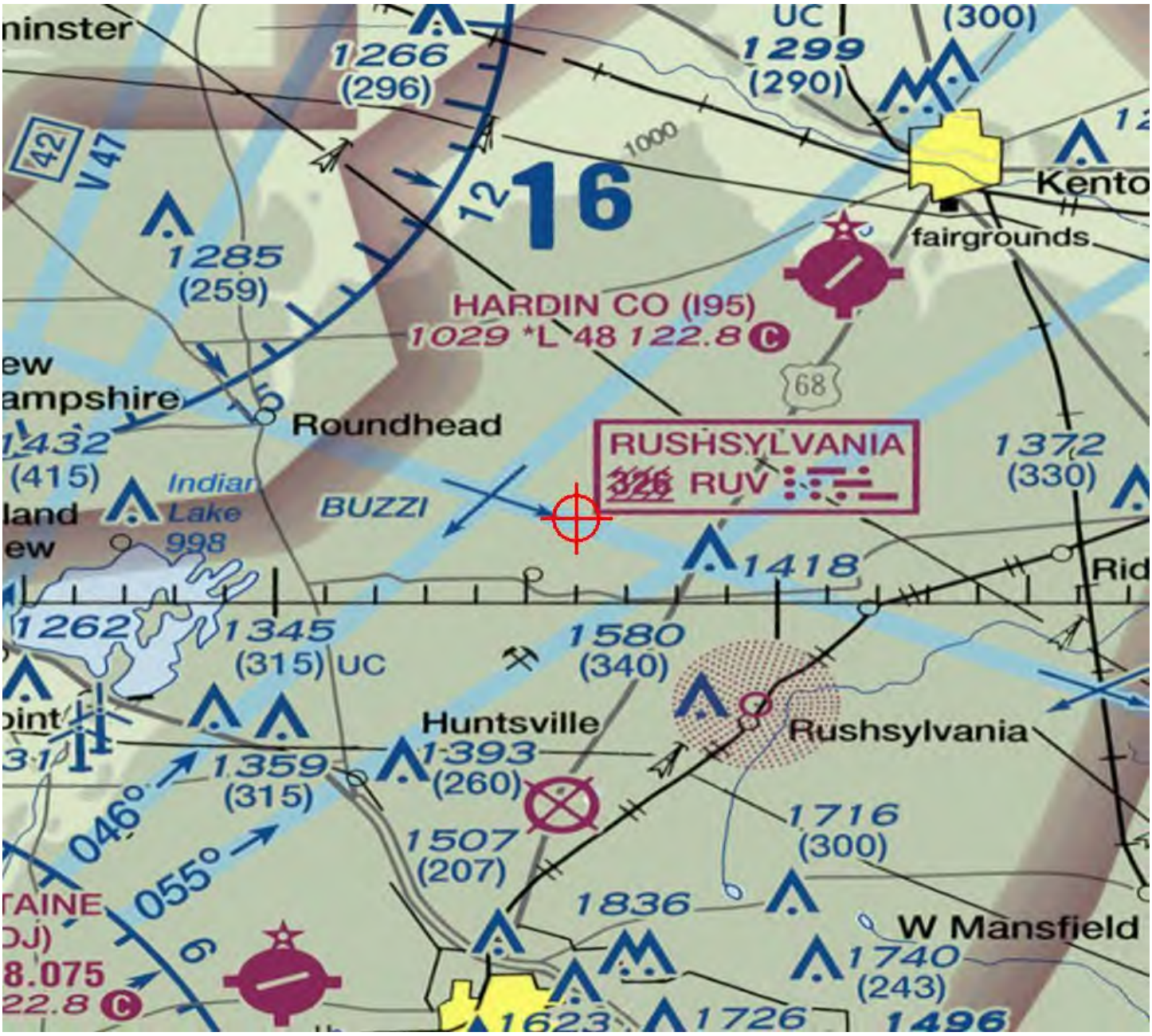
TOPO Map for ASN 2016-WTE-1667-OE



Sectional Map for ASN 2016-WTE-1667-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1668-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T171
Location:	Roundhead, OH
Latitude:	40-32-55.72N NAD 83
Longitude:	83-44-04.23W
Heights:	1088 feet site elevation (SE)
	492 feet above ground level (AGL)
	1580 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1668-OE.

Signature Control No: 284652005-300833815 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
2016-WTE-1602-OE / 23 ft.
2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
2016-WTE-1641-OE / 7 ft.
2016-WTE-1644-OE / 27 ft.
2016-WTE-1648-OE / 60 ft.
2016-WTE-1649-OE / 71 ft.
2016-WTE-1650-OE / 72 ft.
2016-WTE-1651-OE / 89 ft.
2016-WTE-1653-OE / 82 ft.
2016-WTE-1654-OE / 13 ft.
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2016-WTE-1656-OE / 45 ft.
2016-WTE-1657-OE / 115 ft.
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2016-WTE-1673-OE / 46 ft.
2016-WTE-1674-OE / 185 ft.
2016-WTE-1675-OE / 174 ft.
2016-WTE-1677-OE / 177 ft.
2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

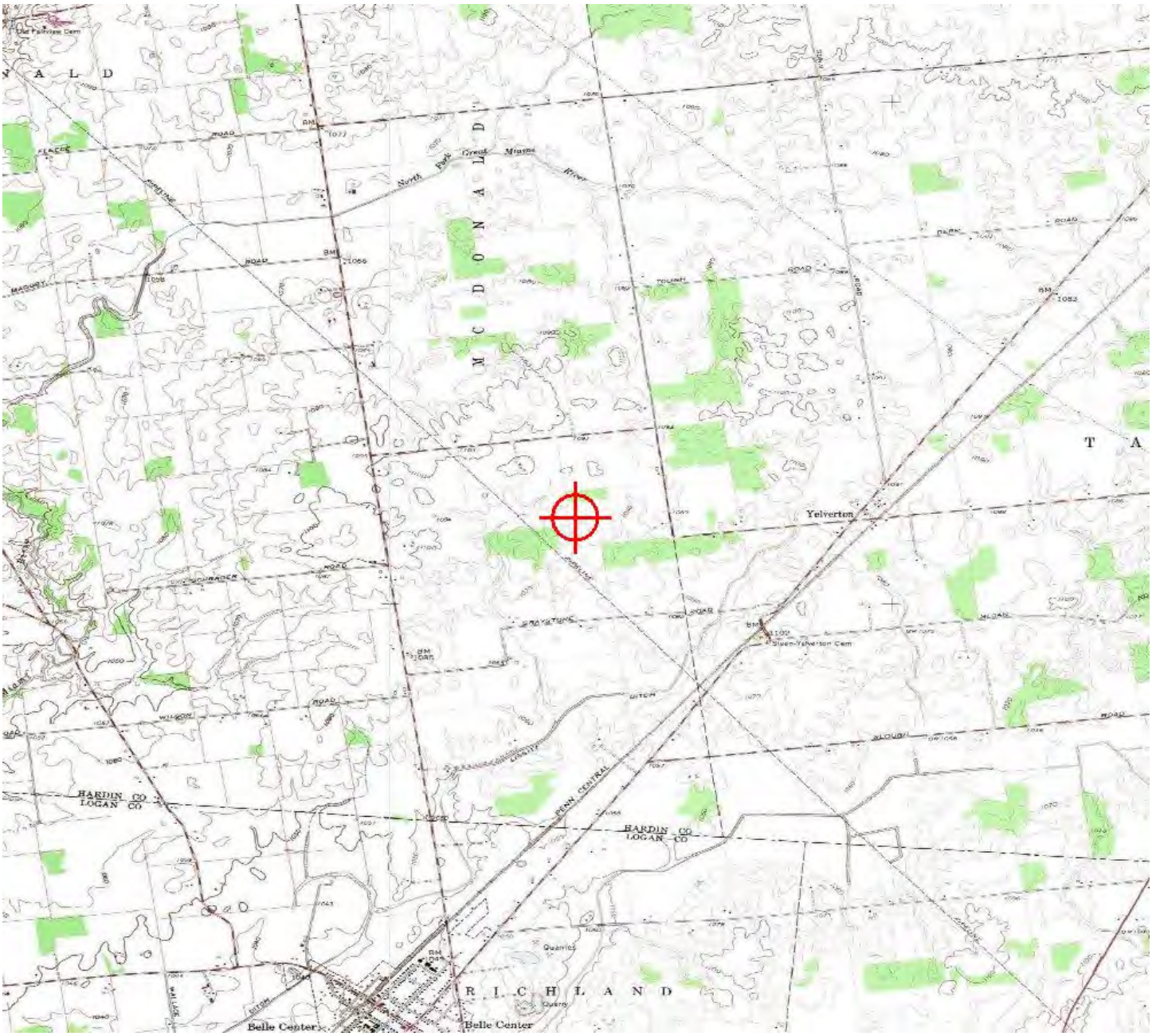
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

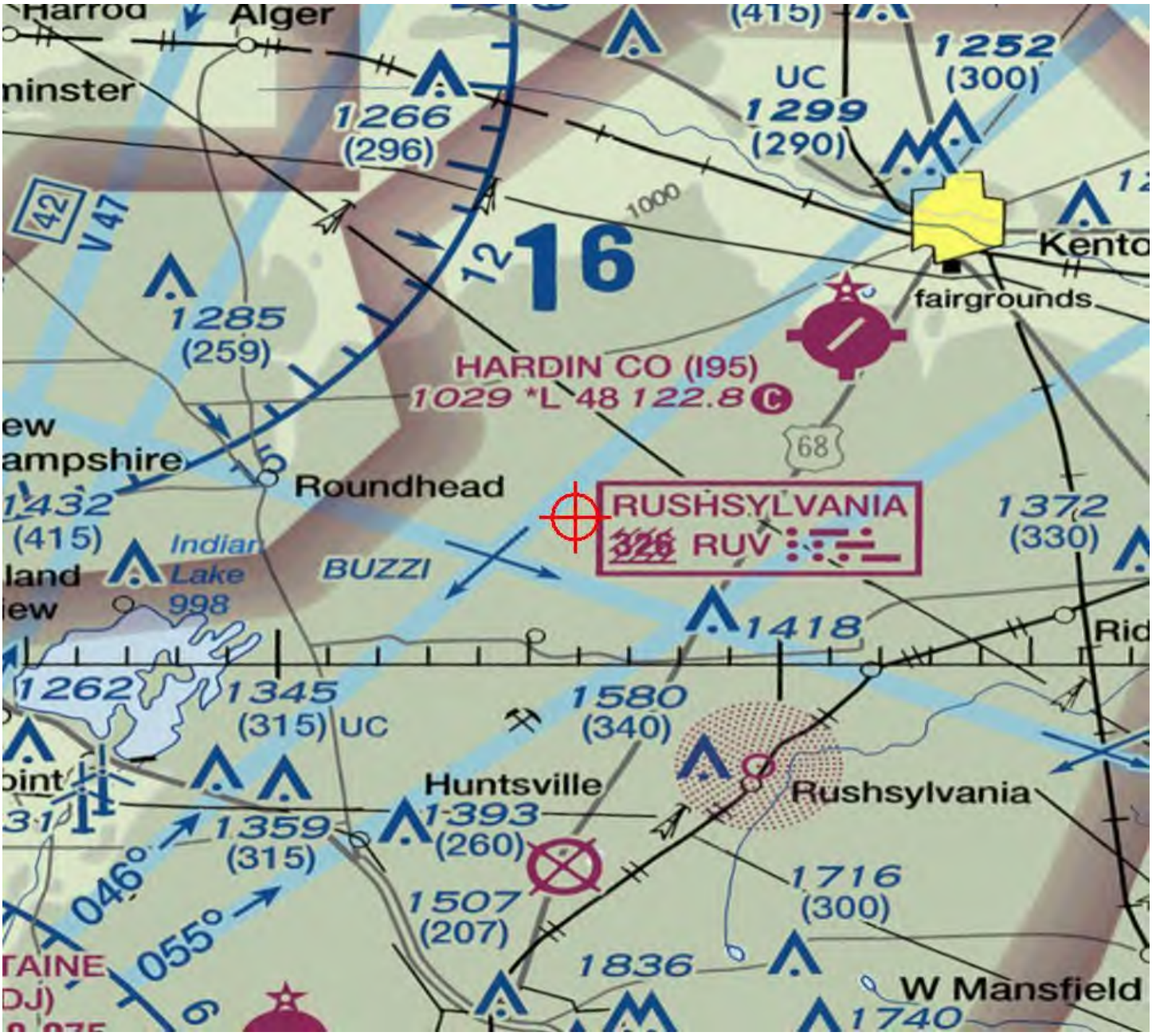
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1668-OE



Sectional Map for ASN 2016-WTE-1668-OE



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10101 Hillwood Parkway
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Aeronautical Study No.
2016-WTE-1669-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
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Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T172
Location:	Roundhead, OH
Latitude:	40-32-07.82N NAD 83
Longitude:	83-44-01.81W
Heights:	1057 feet site elevation (SE) 492 feet above ground level (AGL) 1549 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1669-OE.

Signature Control No: 284652006-300833818 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

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2016-WTE-1597-OE / 130 ft.
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The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

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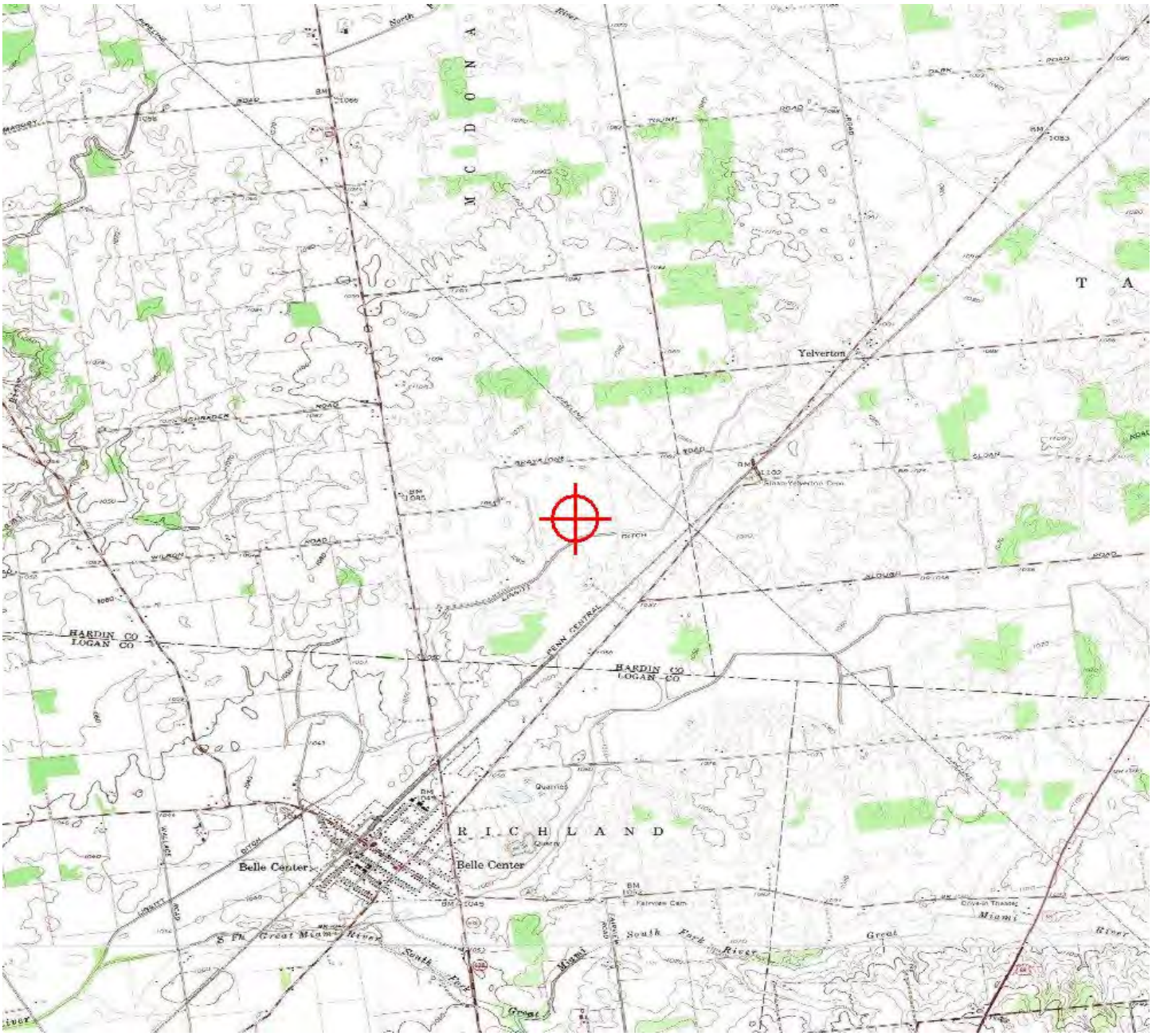
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1669-OE



Sectional Map for ASN 2016-WTE-1669-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1670-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T173
Location:	Roundhead, OH
Latitude:	40-32-44.73N NAD 83
Longitude:	83-43-57.36W
Heights:	1079 feet site elevation (SE) 492 feet above ground level (AGL) 1571 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1670-OE.

Signature Control No: 284652007-300833821 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
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Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

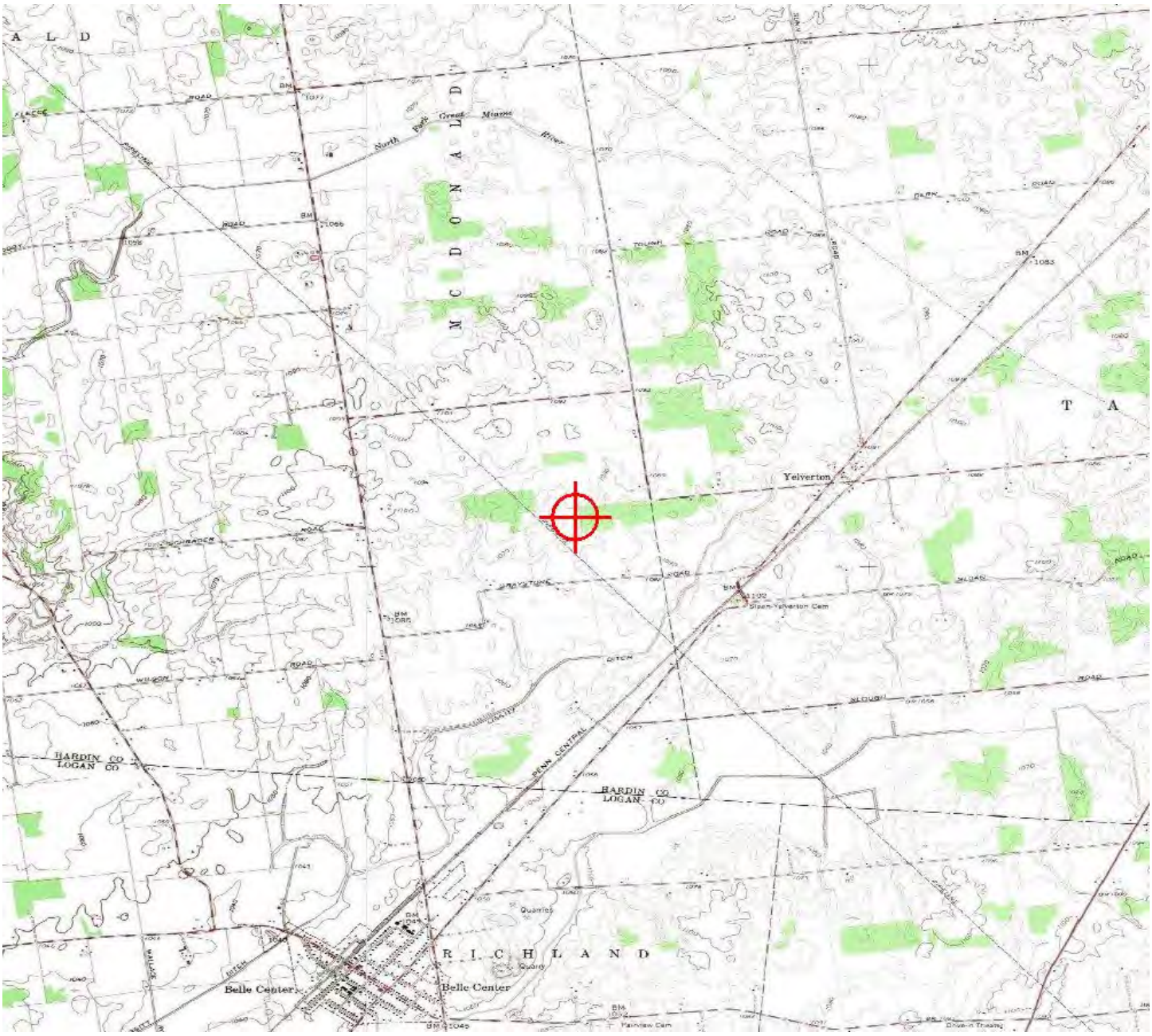
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1670-OE



Sectional Map for ASN 2016-WTE-1670-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1686-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T174
Location:	Roundhead, OH
Latitude:	40-30-36.84N NAD 83
Longitude:	83-43-51.87W
Heights:	1069 feet site elevation (SE)
	492 feet above ground level (AGL)
	1561 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1686-OE.

Signature Control No: 284652024-300833877 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

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IFR - instrument flight rules
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

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Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

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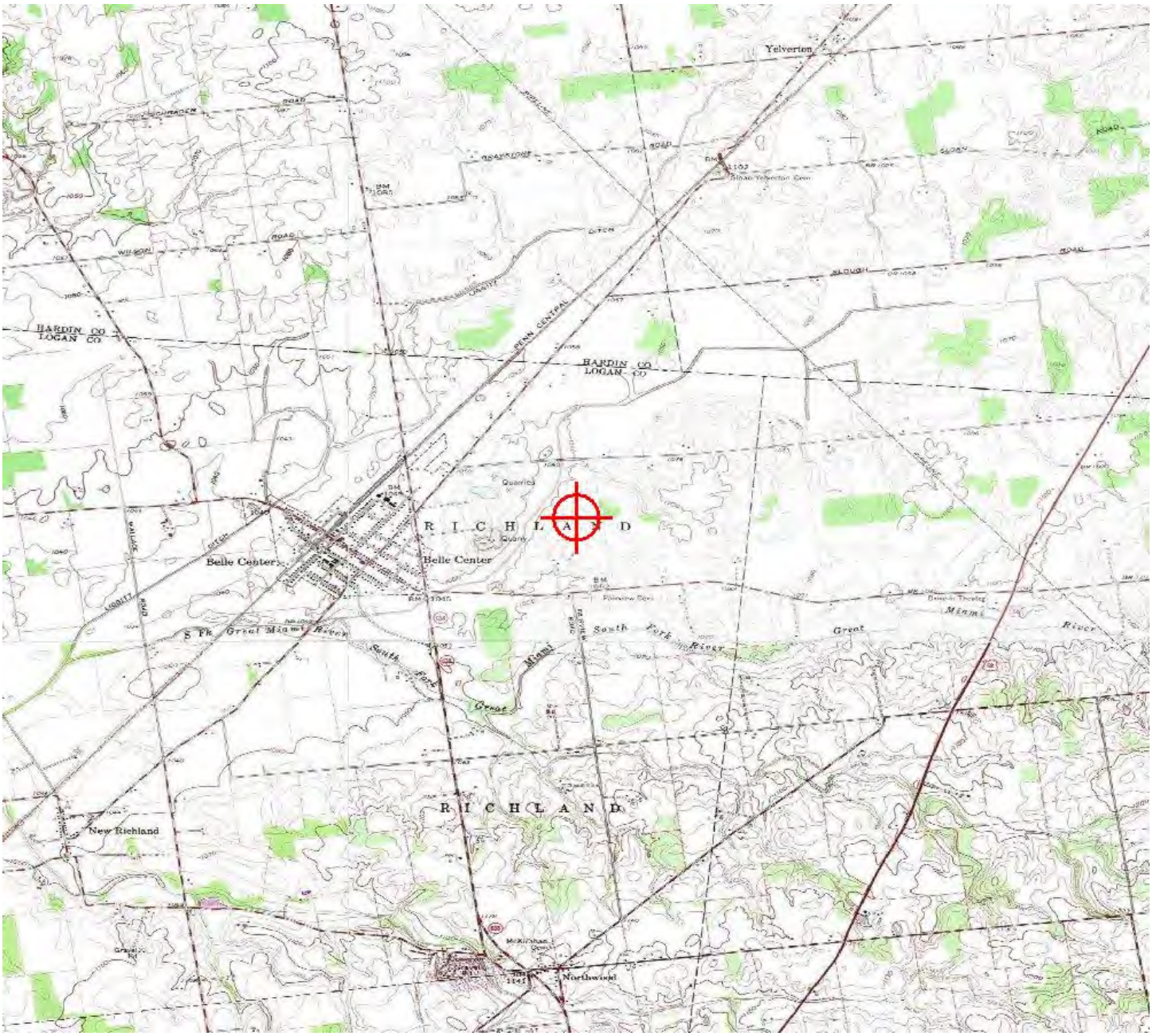
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

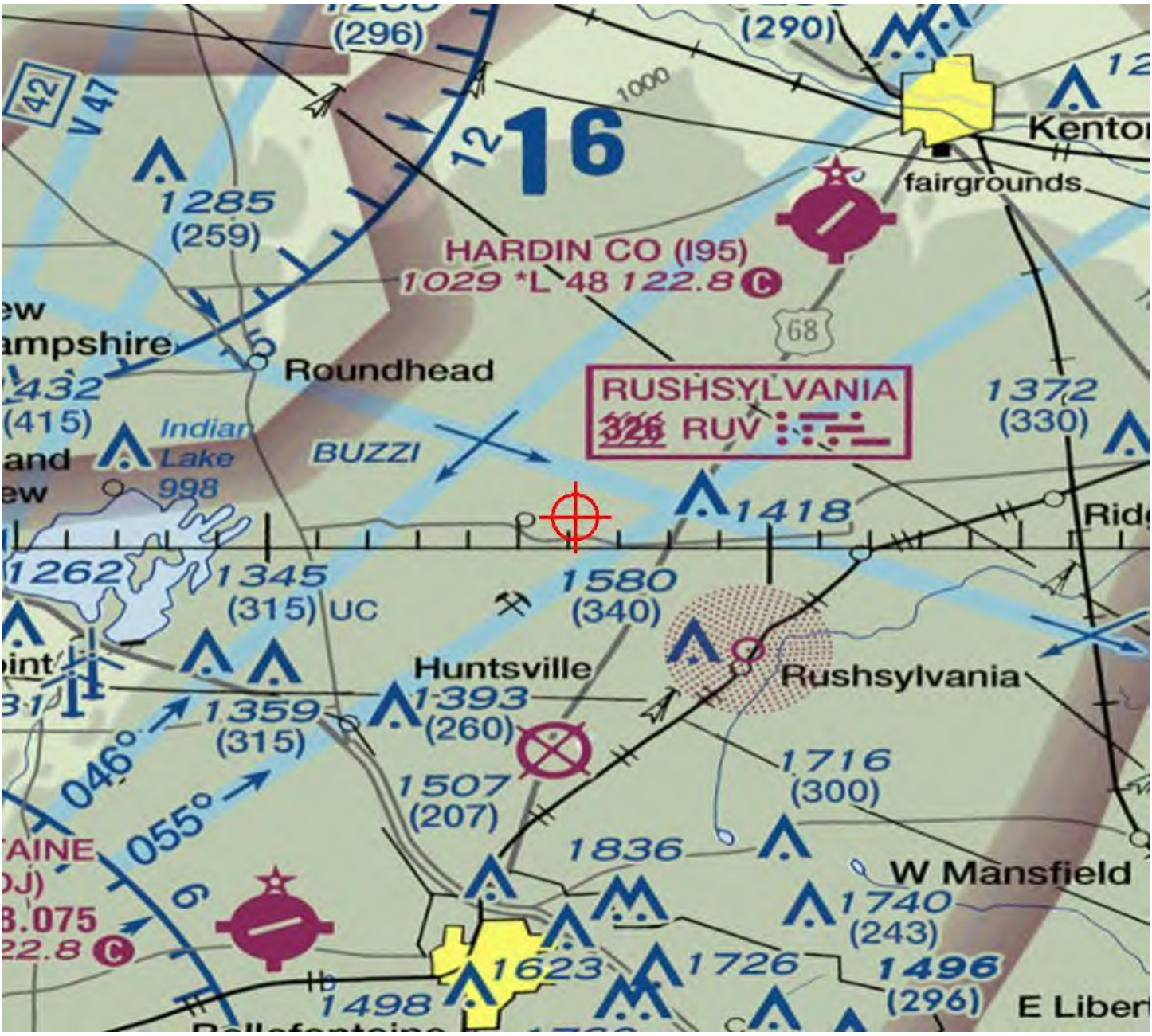
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1686-OE



Sectional Map for ASN 2016-WTE-1686-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1687-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T176
Location:	Roundhead, OH
Latitude:	40-30-25.26N NAD 83
Longitude:	83-43-45.15W
Heights:	1070 feet site elevation (SE) 492 feet above ground level (AGL) 1562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
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See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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Signature Control No: 284652025-300833881 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

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2016-WTE-1665-OE / 87 ft.
2016-WTE-1666-OE / 126 ft.
2016-WTE-1668-OE / 40 ft.
2016-WTE-1670-OE / 34 ft.
2016-WTE-1673-OE / 46 ft.
2016-WTE-1674-OE / 185 ft.
2016-WTE-1675-OE / 174 ft.
2016-WTE-1677-OE / 177 ft.
2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

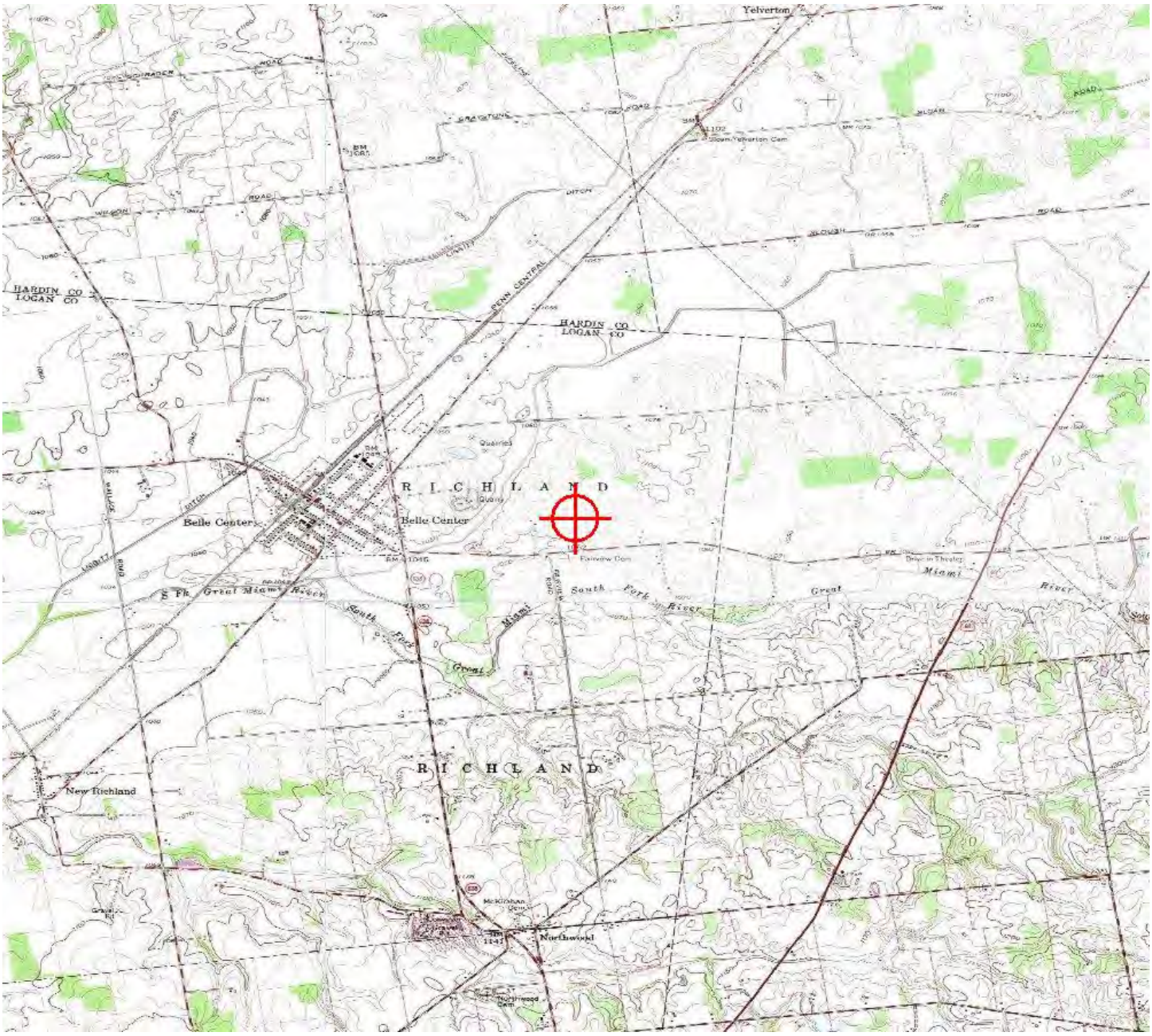
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1687-OE



Sectional Map for ASN 2016-WTE-1687-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1671-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T179
Location:	Roundhead, OH
Latitude:	40-35-30.14N NAD 83
Longitude:	83-43-47.34W
Heights:	1077 feet site elevation (SE) 492 feet above ground level (AGL) 1569 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1671-OE.

Signature Control No: 284652008-300833321 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
Cat D - Category D, approach speeds of 141 - 165 knots
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for the structures in the proposed wind farm are 2016-WTE-1597 thru 1701-OE. The proposed wind farm would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1604-OE / 236 ft.
2016-WTE-1671-OE / 186 ft.

The following proposals would be located in the Cat D climb/descent area of the VFR traffic pattern associated with Runway 04/22 at I95 and would exceed as follows as applied to a visual approach runway:

2016-WTE-1604-OE / Exceeds by 196 ft.
2016-WTE-1671-OE / Exceeds by 186 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The proposal was circularized for public comment on June 22, 2016. One response was received as a result of the circularization; the Ohio Department of Transportation (ODOT) stated that the sponsor is advised that this proposed structure requires a permit from the ODOT Office of Aviation prior to construction.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route instrument flight rule (IFR) operations or procedures other

than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

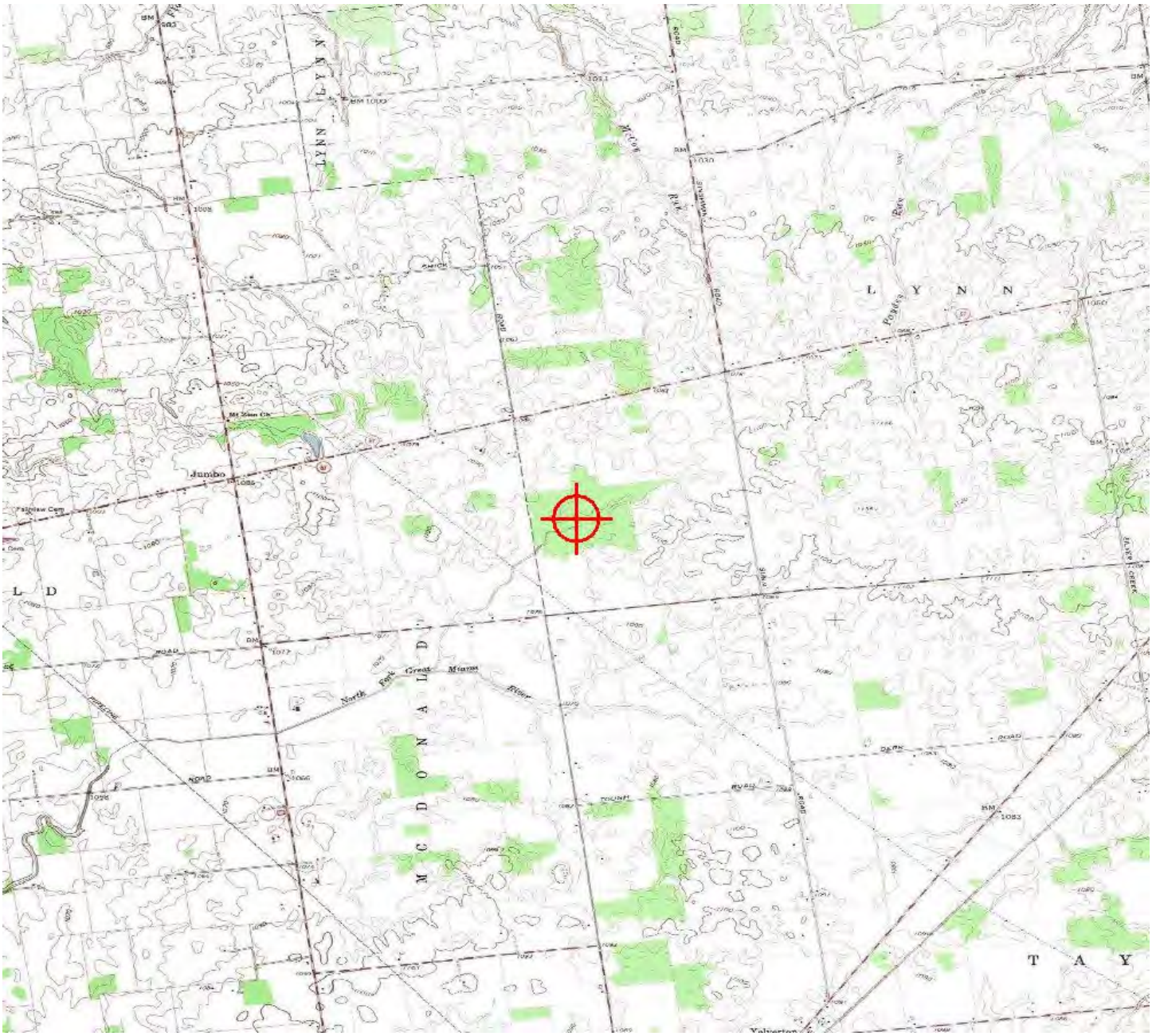
Study for possible VFR effect disclosed that the proposed structure would have no significant effect on any existing or proposed arrival or departure VFR operations or procedures. Further study did not indicate that the proposals that would be located in the Cat D VFR traffic pattern airspace would affect a significant number of aircraft operations. Therefore, the proposal would not have a substantial adverse effect on VFR traffic pattern operations at I95. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

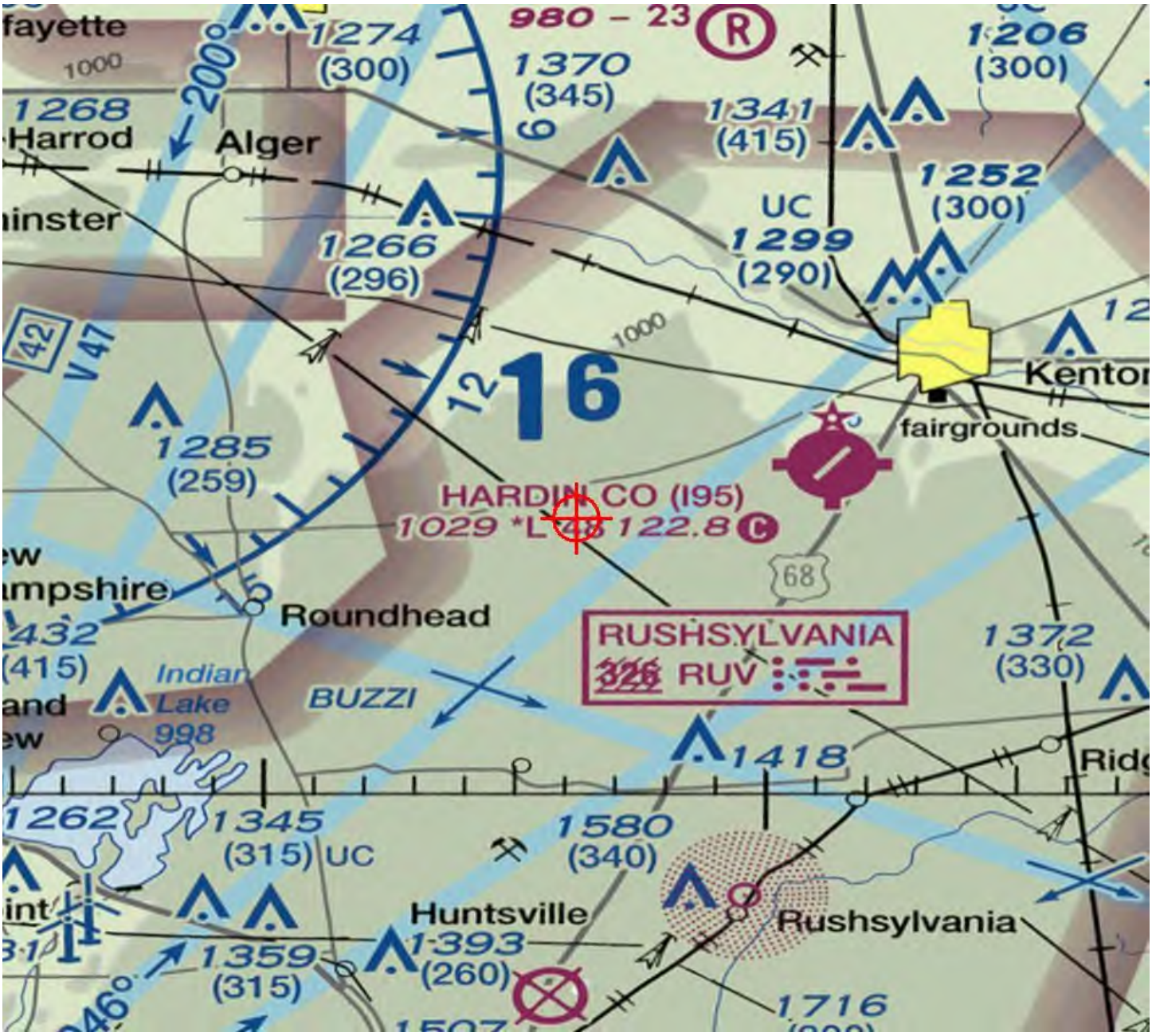
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1671-OE



Sectional Map for ASN 2016-WTE-1671-OE



Mail Processing Center
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Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1672-OE

Issued Date: 08/03/2016

Jeff McKee
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**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T180
Location:	Roundhead, OH
Latitude:	40-31-29.96N NAD 83
Longitude:	83-43-36.43W
Heights:	1054 feet site elevation (SE) 492 feet above ground level (AGL) 1546 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1672-OE.

Signature Control No: 284652010-300833825 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
2016-WTE-1602-OE / 23 ft.
2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
2016-WTE-1641-OE / 7 ft.
2016-WTE-1644-OE / 27 ft.
2016-WTE-1648-OE / 60 ft.
2016-WTE-1649-OE / 71 ft.
2016-WTE-1650-OE / 72 ft.
2016-WTE-1651-OE / 89 ft.
2016-WTE-1653-OE / 82 ft.
2016-WTE-1654-OE / 13 ft.
2016-WTE-1655-OE / 64 ft.
2016-WTE-1656-OE / 45 ft.
2016-WTE-1657-OE / 115 ft.
2016-WTE-1658-OE / 13 ft.
2016-WTE-1660-OE / 108 ft.
2016-WTE-1661-OE / 76 ft.

2016-WTE-1662-OE / 116 ft.
2016-WTE-1665-OE / 87 ft.
2016-WTE-1666-OE / 126 ft.
2016-WTE-1668-OE / 40 ft.
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2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

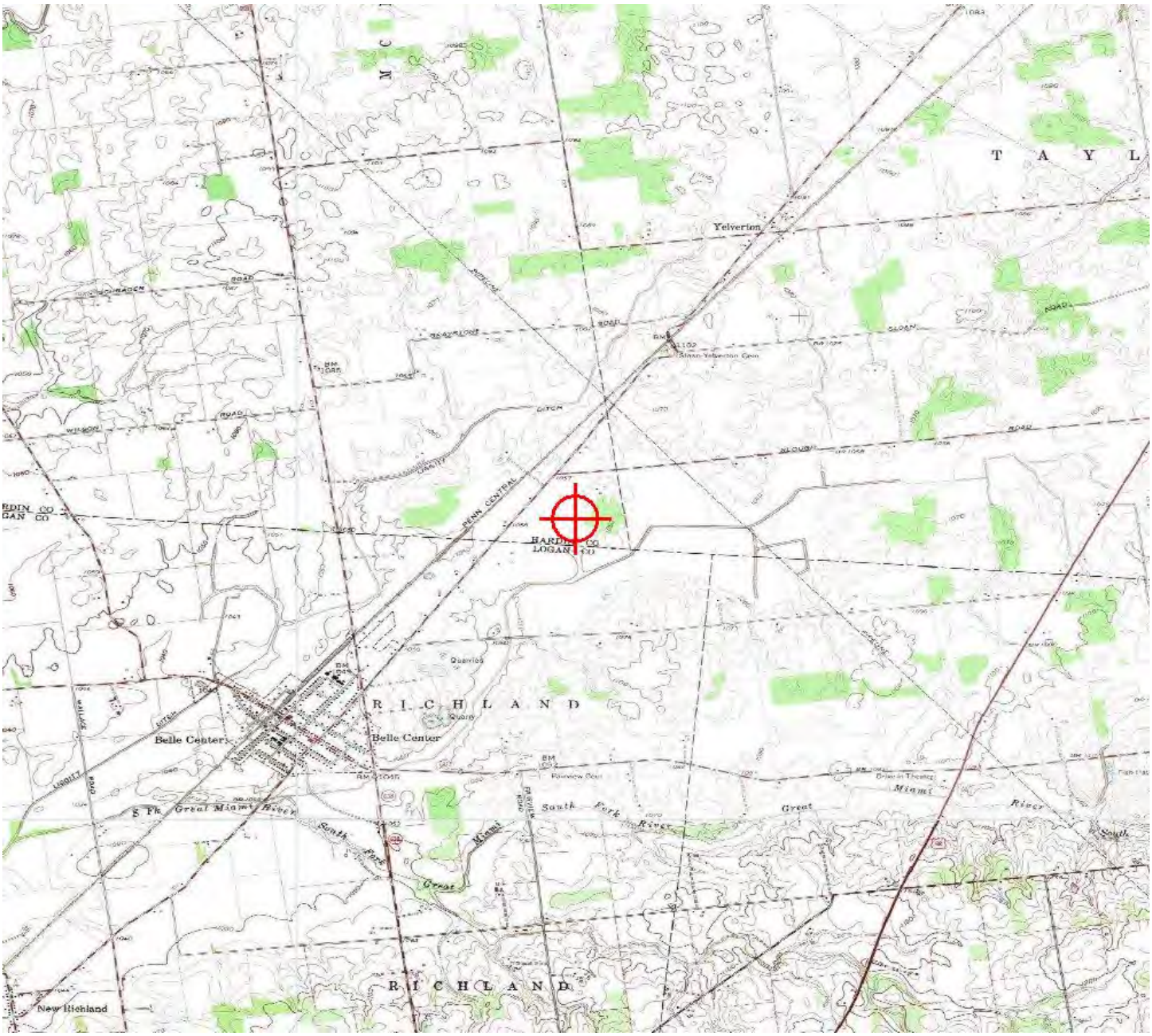
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1672-OE



Sectional Map for ASN 2016-WTE-1672-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1688-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
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3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T181
Location:	Roundhead, OH
Latitude:	40-29-55.03N NAD 83
Longitude:	83-43-34.37W
Heights:	1070 feet site elevation (SE) 492 feet above ground level (AGL) 1562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1688-OE.

Signature Control No: 284652026-300833883 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
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Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

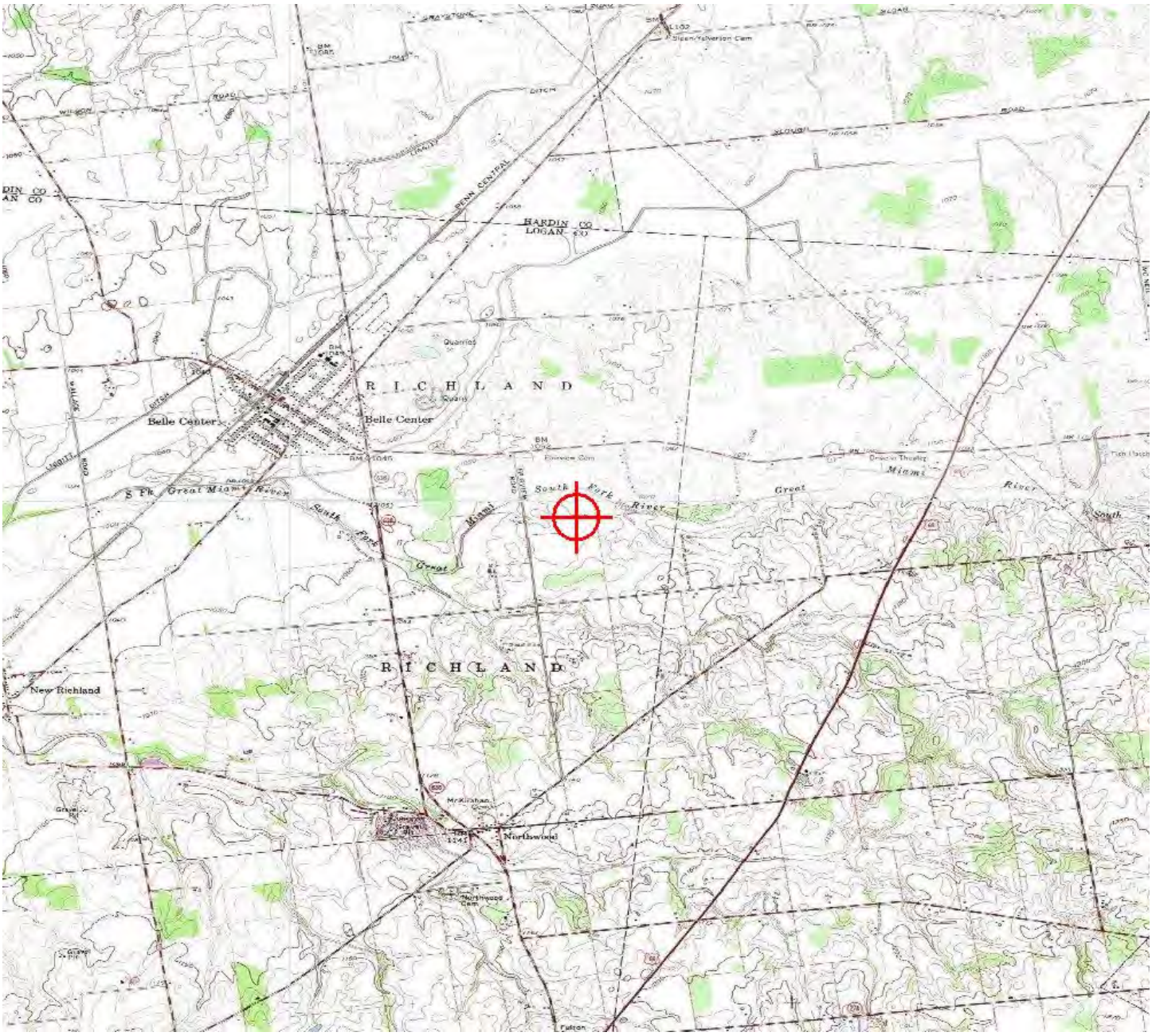
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

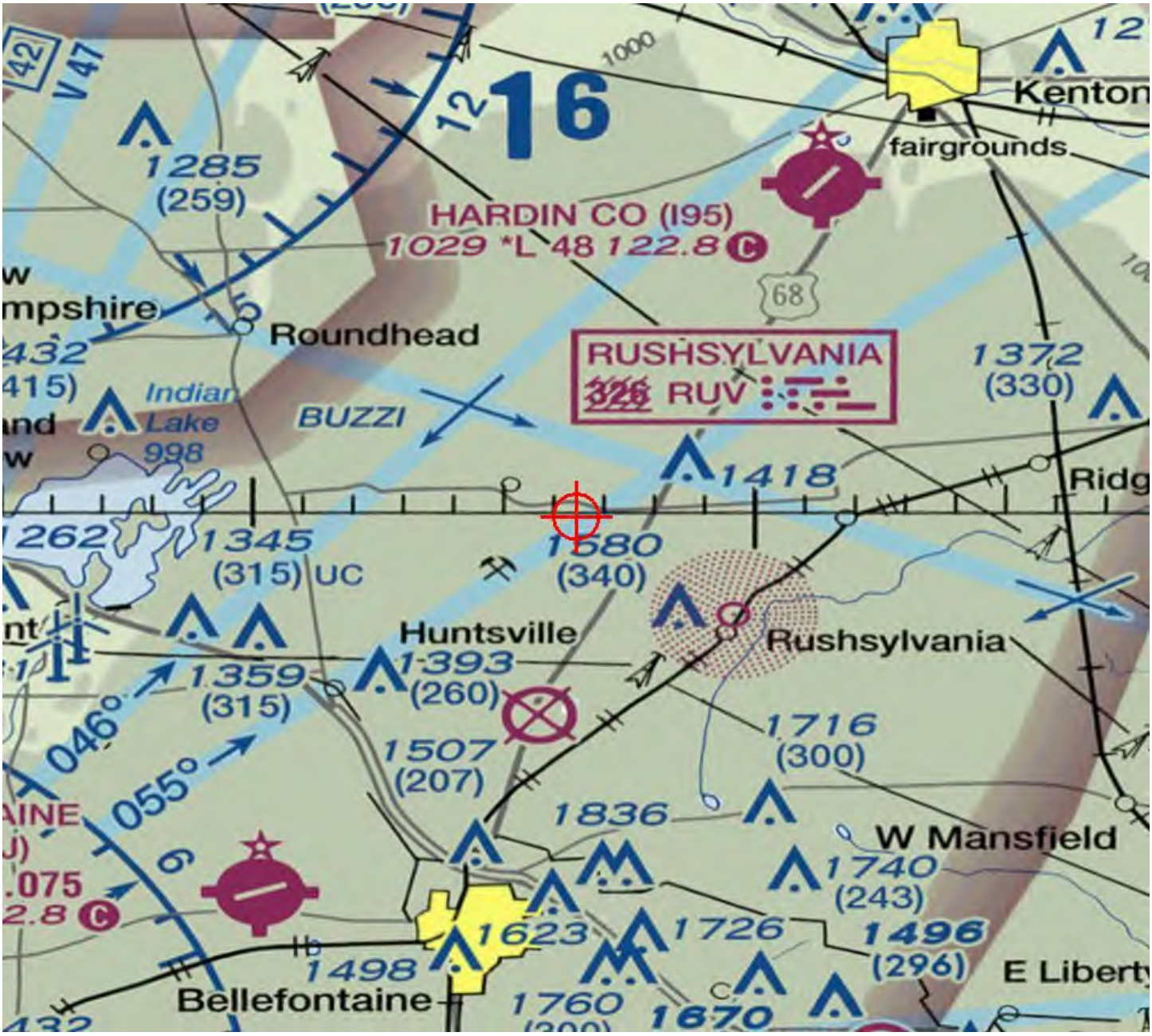
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1688-OE



Sectional Map for ASN 2016-WTE-1688-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1673-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T182
Location:	Roundhead, OH
Latitude:	40-32-40.45N NAD 83
Longitude:	83-43-38.15W
Heights:	1076 feet site elevation (SE) 492 feet above ground level (AGL) 1568 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1673-OE.

Signature Control No: 284652011-300833829 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

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ARP - Airport Reference Point
ASN - Aeronautical Study Number
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

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The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

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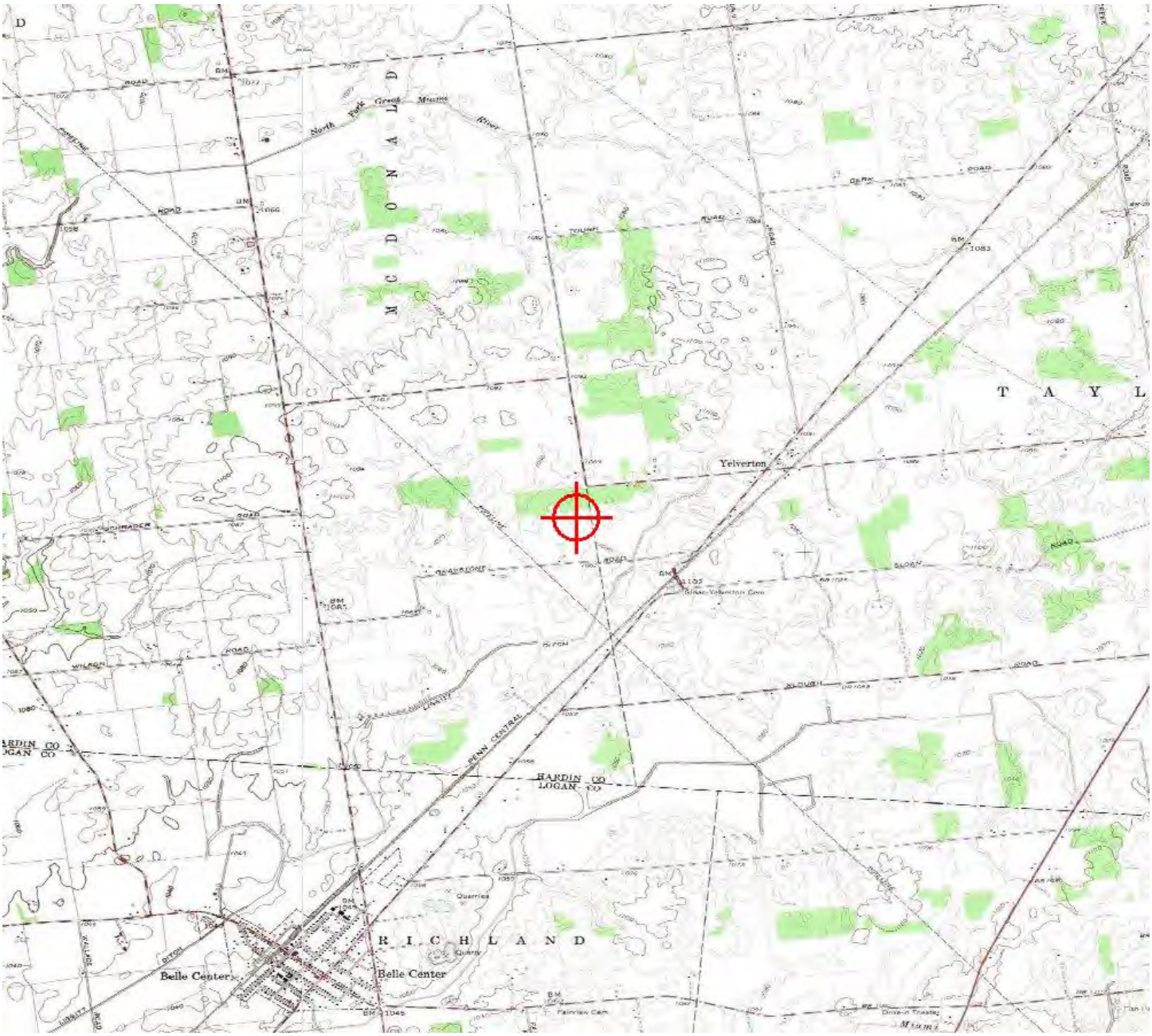
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1673-OE



Sectional Map for ASN 2016-WTE-1673-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1674-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T183
Location:	Roundhead, OH
Latitude:	40-35-14.90N NAD 83
Longitude:	83-43-41.96W
Heights:	1078 feet site elevation (SE) 492 feet above ground level (AGL) 1570 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1674-OE.

Signature Control No: 284652012-300833833 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

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2016-WTE-1654-OE / 13 ft.
2016-WTE-1655-OE / 64 ft.
2016-WTE-1656-OE / 45 ft.
2016-WTE-1657-OE / 115 ft.
2016-WTE-1658-OE / 13 ft.
2016-WTE-1660-OE / 108 ft.
2016-WTE-1661-OE / 76 ft.

2016-WTE-1662-OE / 116 ft.
2016-WTE-1665-OE / 87 ft.
2016-WTE-1666-OE / 126 ft.
2016-WTE-1668-OE / 40 ft.
2016-WTE-1670-OE / 34 ft.
2016-WTE-1673-OE / 46 ft.
2016-WTE-1674-OE / 185 ft.
2016-WTE-1675-OE / 174 ft.
2016-WTE-1677-OE / 177 ft.
2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

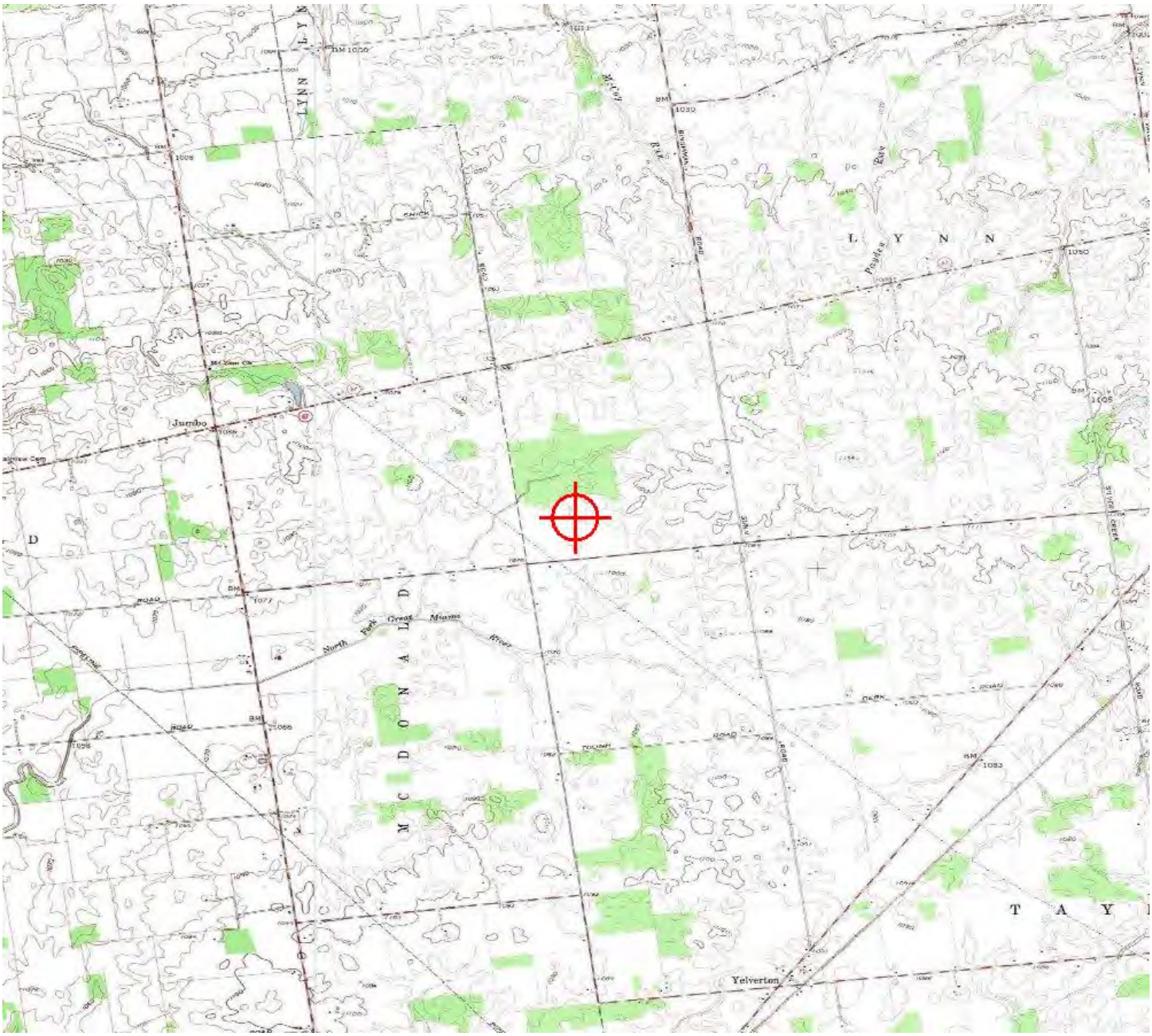
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1674-OE



Sectional Map for ASN 2016-WTE-1674-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1689-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T184
Location:	Roundhead, OH
Latitude:	40-29-48.33N NAD 83
Longitude:	83-43-21.57W
Heights:	1069 feet site elevation (SE)
	492 feet above ground level (AGL)
	1561 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1689-OE.

Signature Control No: 284652027-300833886 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
2016-WTE-1602-OE / 23 ft.
2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
2016-WTE-1641-OE / 7 ft.
2016-WTE-1644-OE / 27 ft.
2016-WTE-1648-OE / 60 ft.
2016-WTE-1649-OE / 71 ft.
2016-WTE-1650-OE / 72 ft.
2016-WTE-1651-OE / 89 ft.
2016-WTE-1653-OE / 82 ft.
2016-WTE-1654-OE / 13 ft.
2016-WTE-1655-OE / 64 ft.
2016-WTE-1656-OE / 45 ft.
2016-WTE-1657-OE / 115 ft.
2016-WTE-1658-OE / 13 ft.
2016-WTE-1660-OE / 108 ft.
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2016-WTE-1662-OE / 116 ft.
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2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

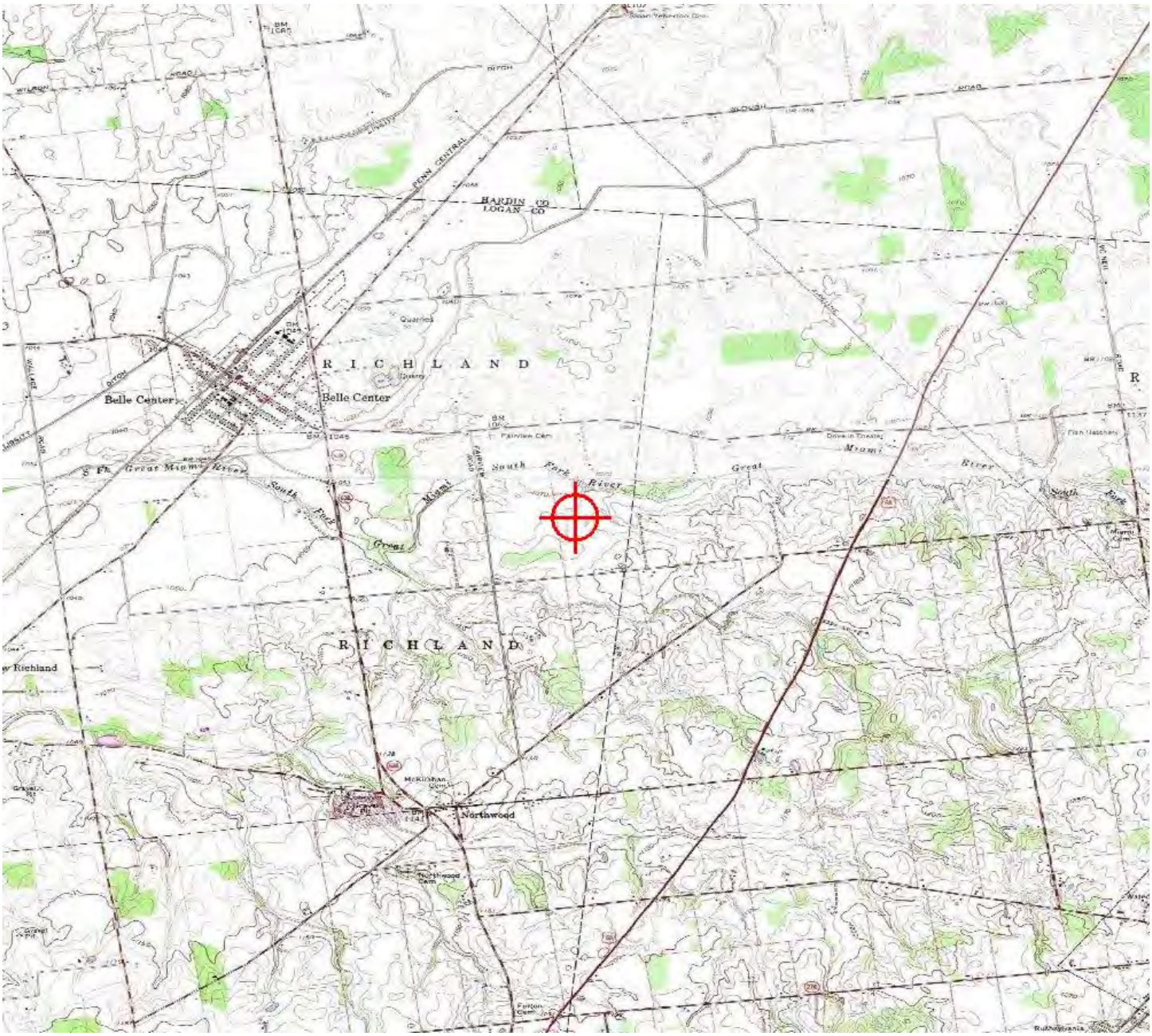
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

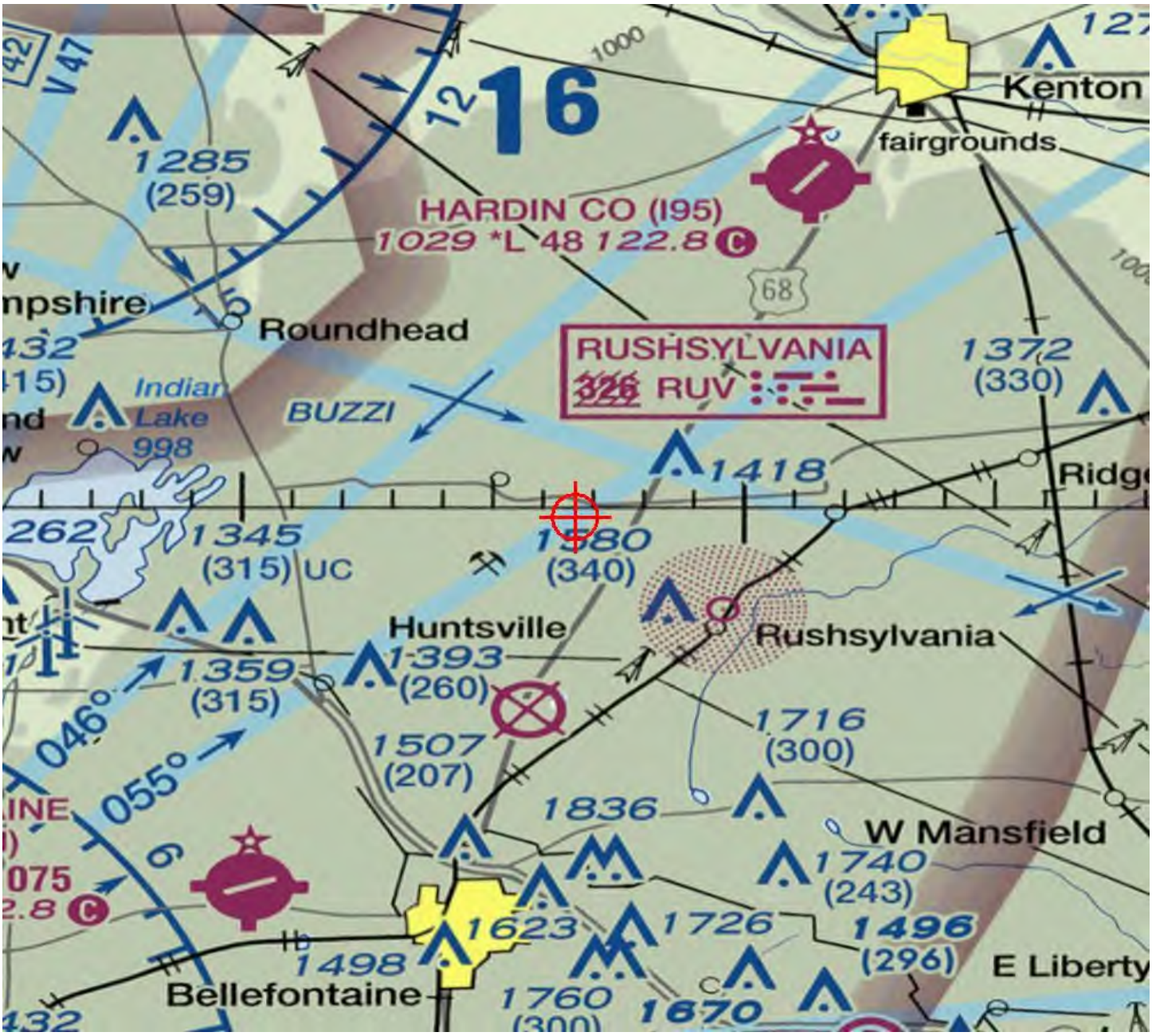
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1689-OE



Sectional Map for ASN 2016-WTE-1689-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1675-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T185
Location:	Roundhead, OH
Latitude:	40-34-38.56N NAD 83
Longitude:	83-43-30.57W
Heights:	1070 feet site elevation (SE)
	492 feet above ground level (AGL)
	1562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1675-OE.

Signature Control No: 284652013-300833836 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

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2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
2016-WTE-1602-OE / 23 ft.
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Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

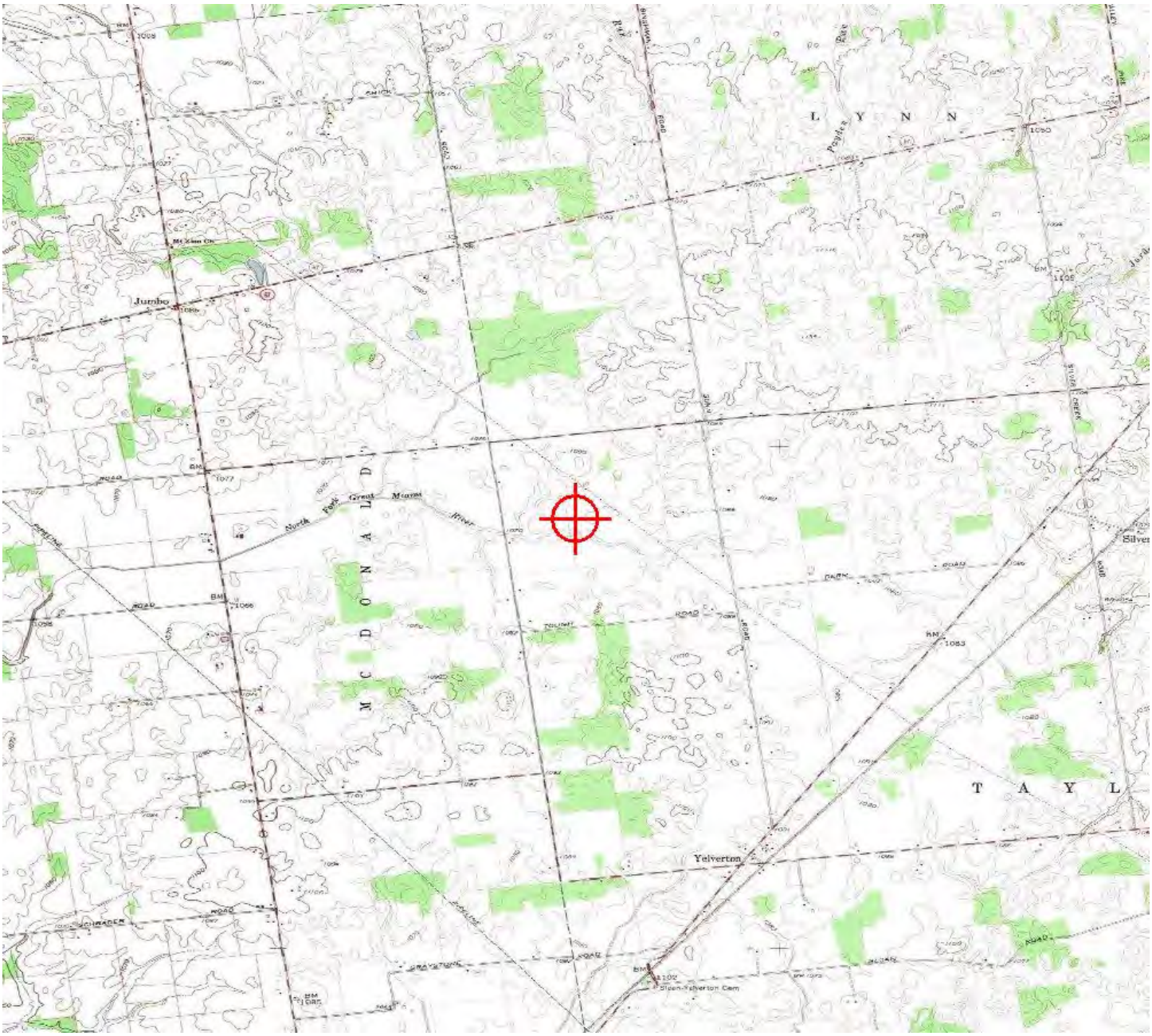
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1675-OE



Sectional Map for ASN 2016-WTE-1675-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1690-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T186
Location:	Roundhead, OH
Latitude:	40-29-41.89N NAD 83
Longitude:	83-43-14.09W
Heights:	1081 feet site elevation (SE) 492 feet above ground level (AGL) 1573 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1690-OE.

Signature Control No: 284652028-300833898 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
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2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
2016-WTE-1641-OE / 7 ft.
2016-WTE-1644-OE / 27 ft.
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2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

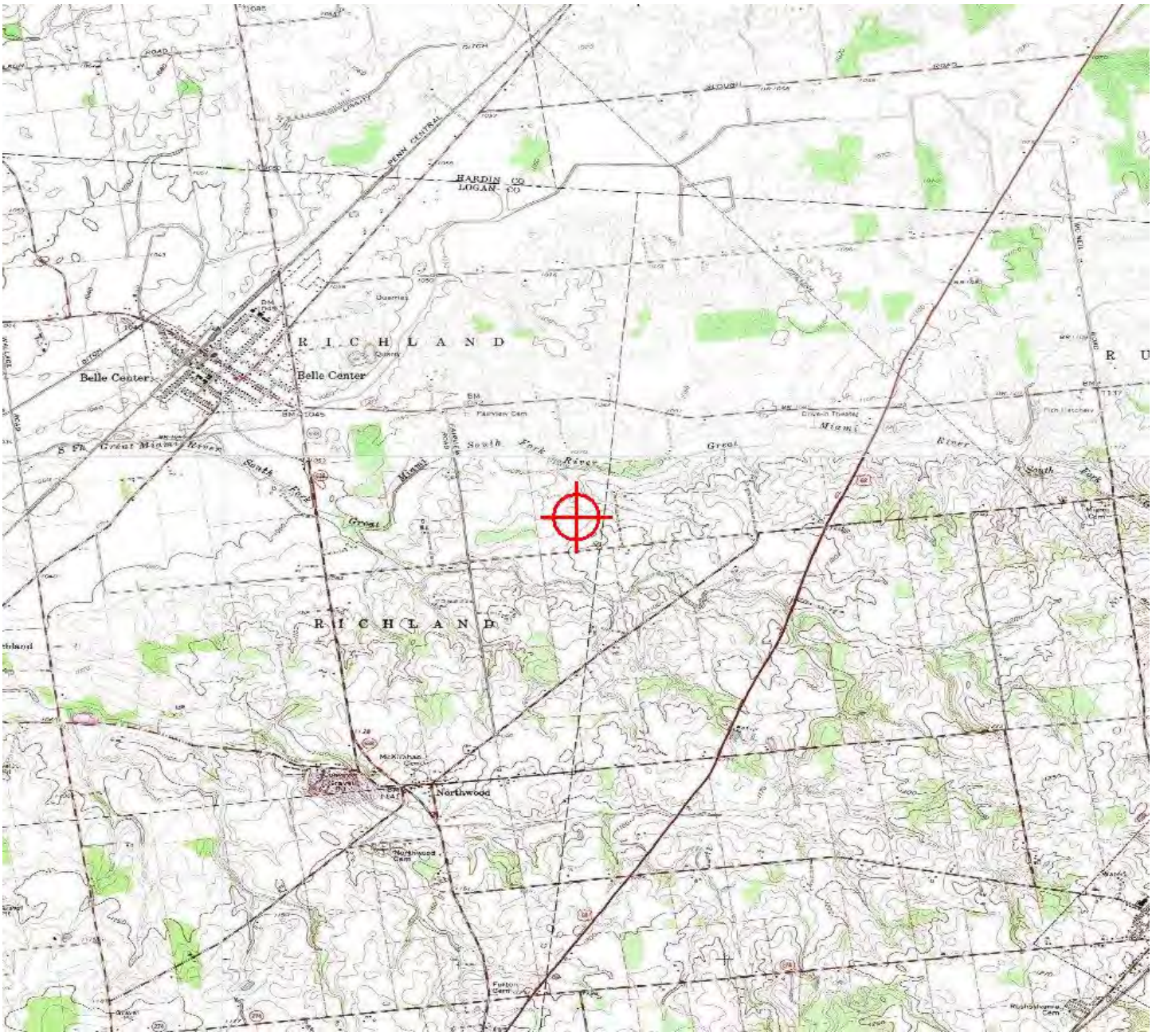
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1690-OE



Sectional Map for ASN 2016-WTE-1690-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1691-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T187
Location:	Roundhead, OH
Latitude:	40-30-45.44N NAD 83
Longitude:	83-43-11.90W
Heights:	1098 feet site elevation (SE)
	492 feet above ground level (AGL)
	1590 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1691-OE.

Signature Control No: 284652029-300833911 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

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ARP - Airport Reference Point
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

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The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

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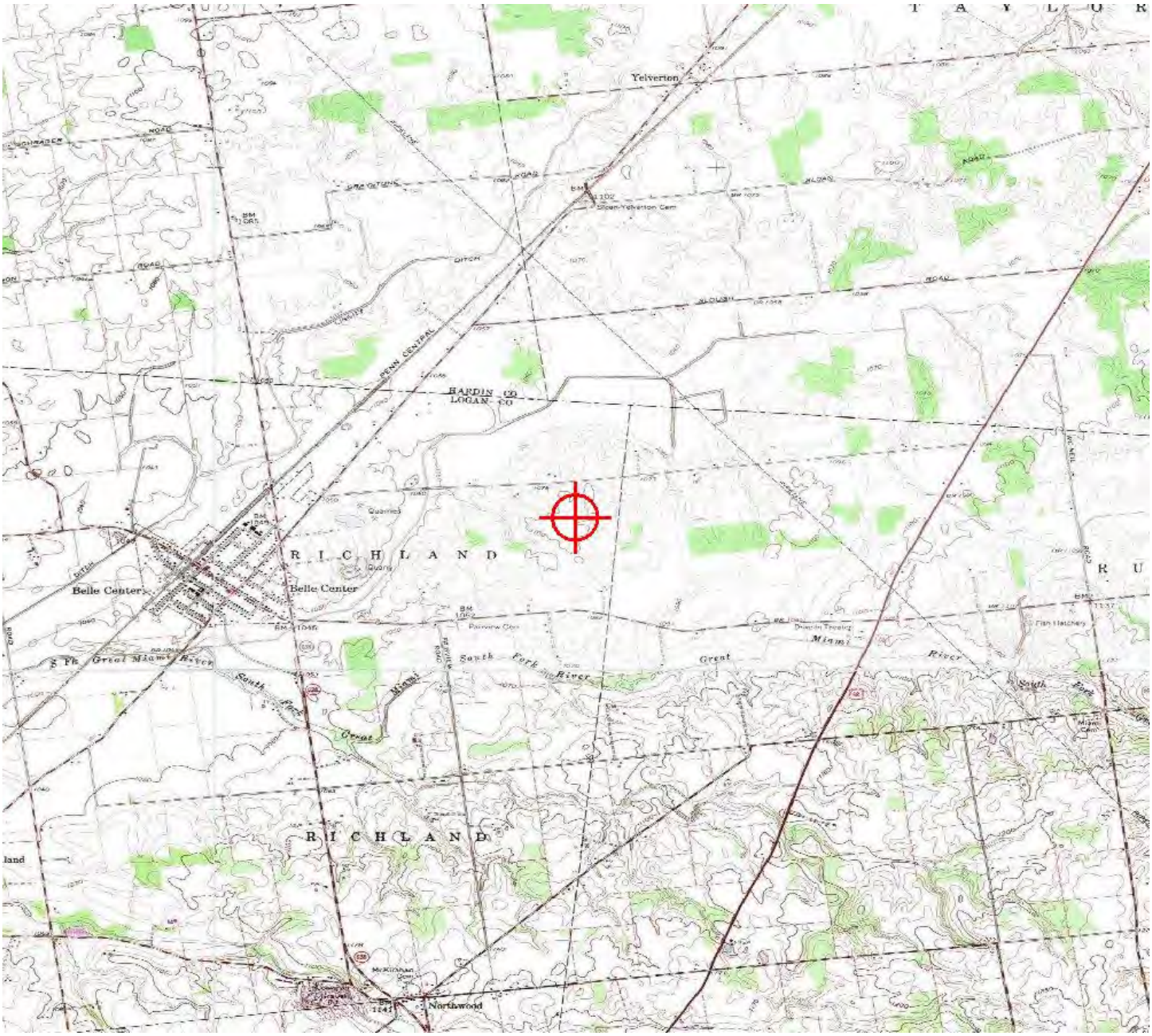
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1691-OE



Sectional Map for ASN 2016-WTE-1691-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1676-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T188
Location:	Roundhead, OH
Latitude:	40-31-32.65N NAD 83
Longitude:	83-43-13.09W
Heights:	1047 feet site elevation (SE) 492 feet above ground level (AGL) 1539 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

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See attachment for additional condition(s) or information.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1676-OE.

Signature Control No: 284652014-300833839 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
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VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
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Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

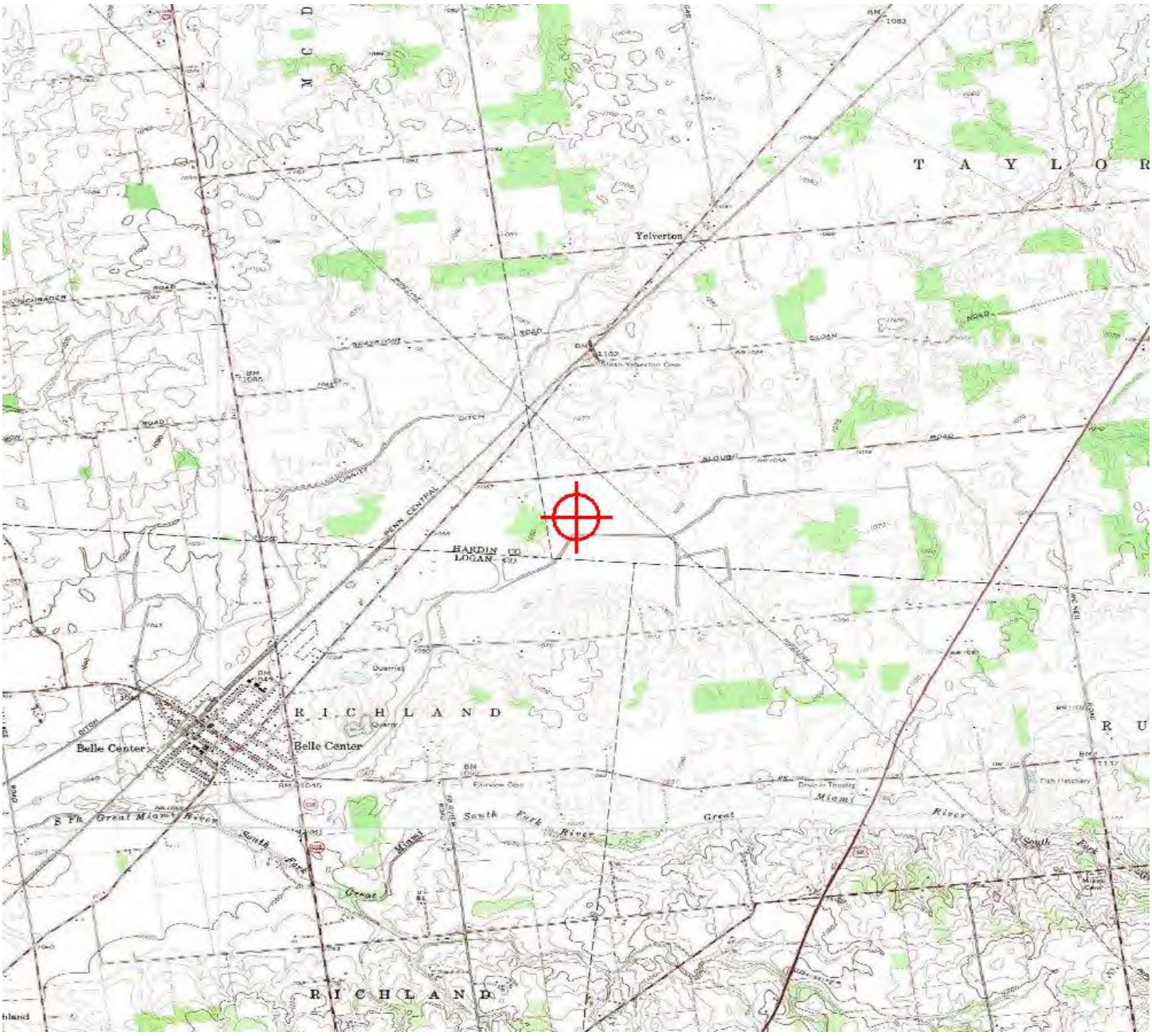
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1676-OE



Sectional Map for ASN 2016-WTE-1676-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1692-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T189
Location:	Roundhead, OH
Latitude:	40-30-32.78N NAD 83
Longitude:	83-43-10.88W
Heights:	1093 feet site elevation (SE)
	492 feet above ground level (AGL)
	1585 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1692-OE.

Signature Control No: 284652030-300833917 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

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Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

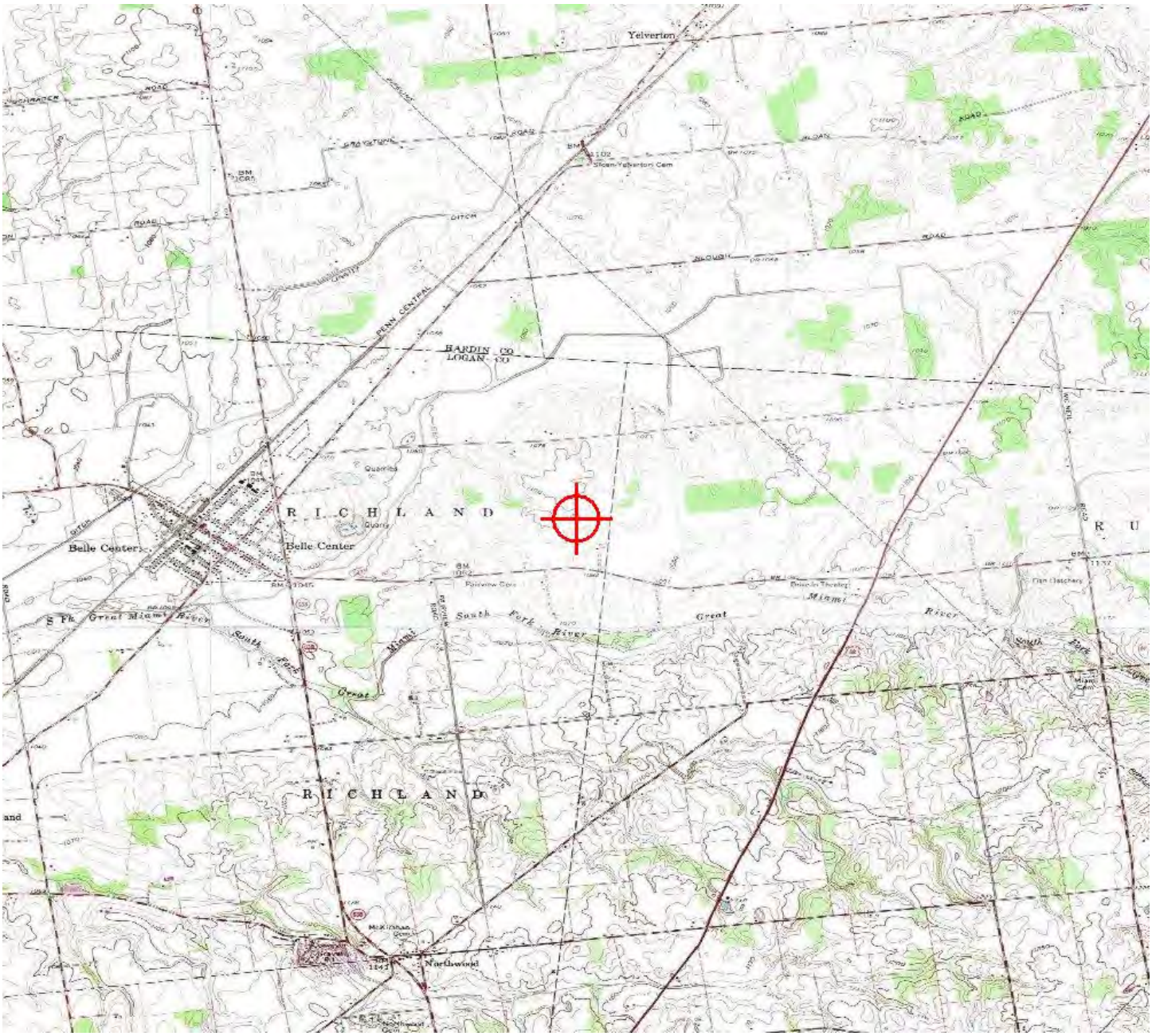
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1692-OE



Sectional Map for ASN 2016-WTE-1692-OE

Mail Processing Center
Federal Aviation Administration
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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1677-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T190
Location:	Roundhead, OH
Latitude:	40-34-27.87N NAD 83
Longitude:	83-43-19.33W
Heights:	1070 feet site elevation (SE) 492 feet above ground level (AGL) 1562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
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See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1677-OE.

Signature Control No: 284652015-300833842 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

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Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

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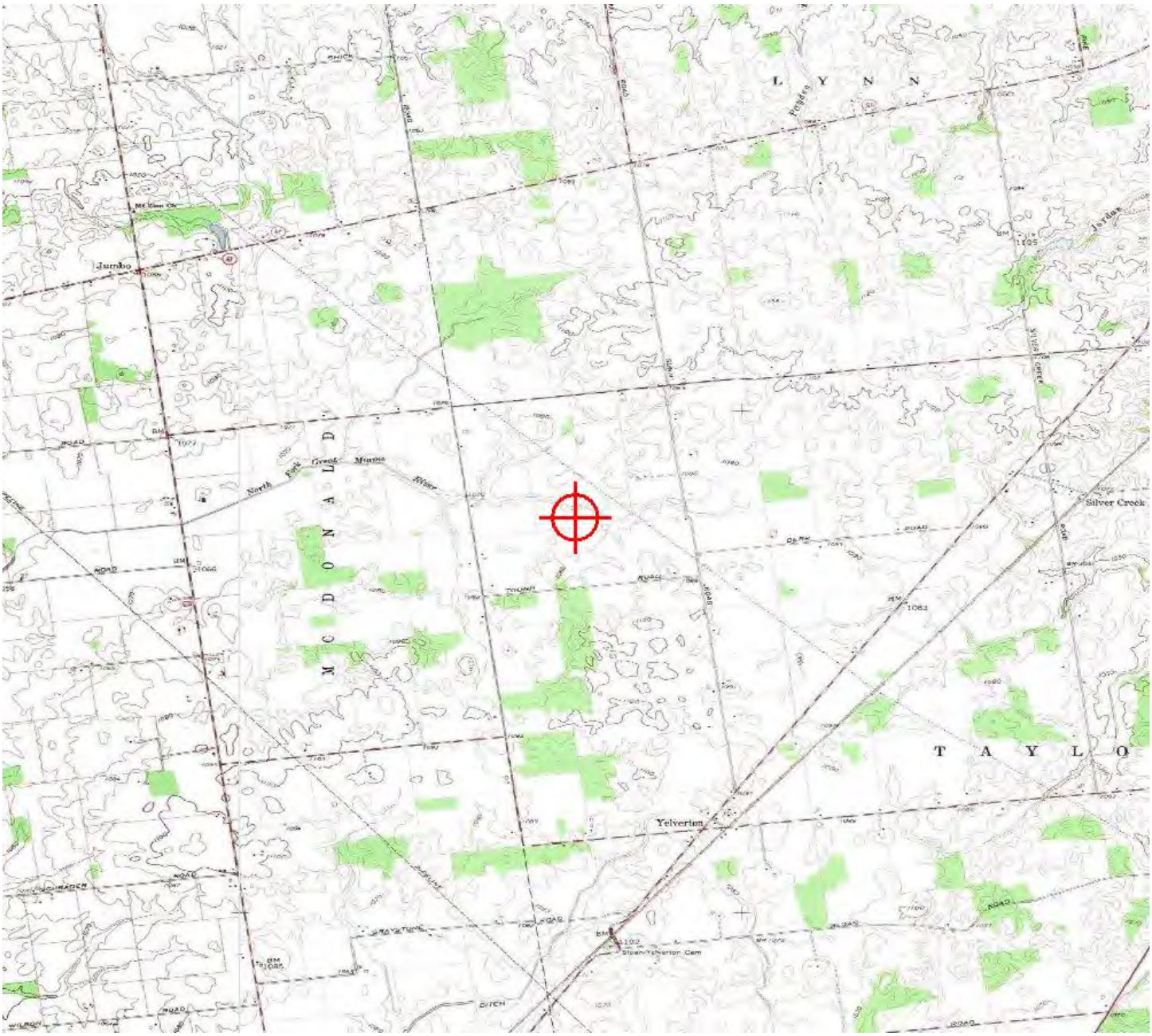
TOPO Map for ASN 2016-WTE-1677-OE



Sectional Map for ASN 2016-WTE-1677-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
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10101 Hillwood Parkway
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Aeronautical Study No.
2016-WTE-1678-OE

Issued Date: 08/03/2016

Jeff McKee
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1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T191
Location:	Roundhead, OH
Latitude:	40-31-58.64N NAD 83
Longitude:	83-43-04.45W
Heights:	1064 feet site elevation (SE) 492 feet above ground level (AGL) 1556 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1678-OE.

Signature Control No: 284652016-300833845 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
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2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

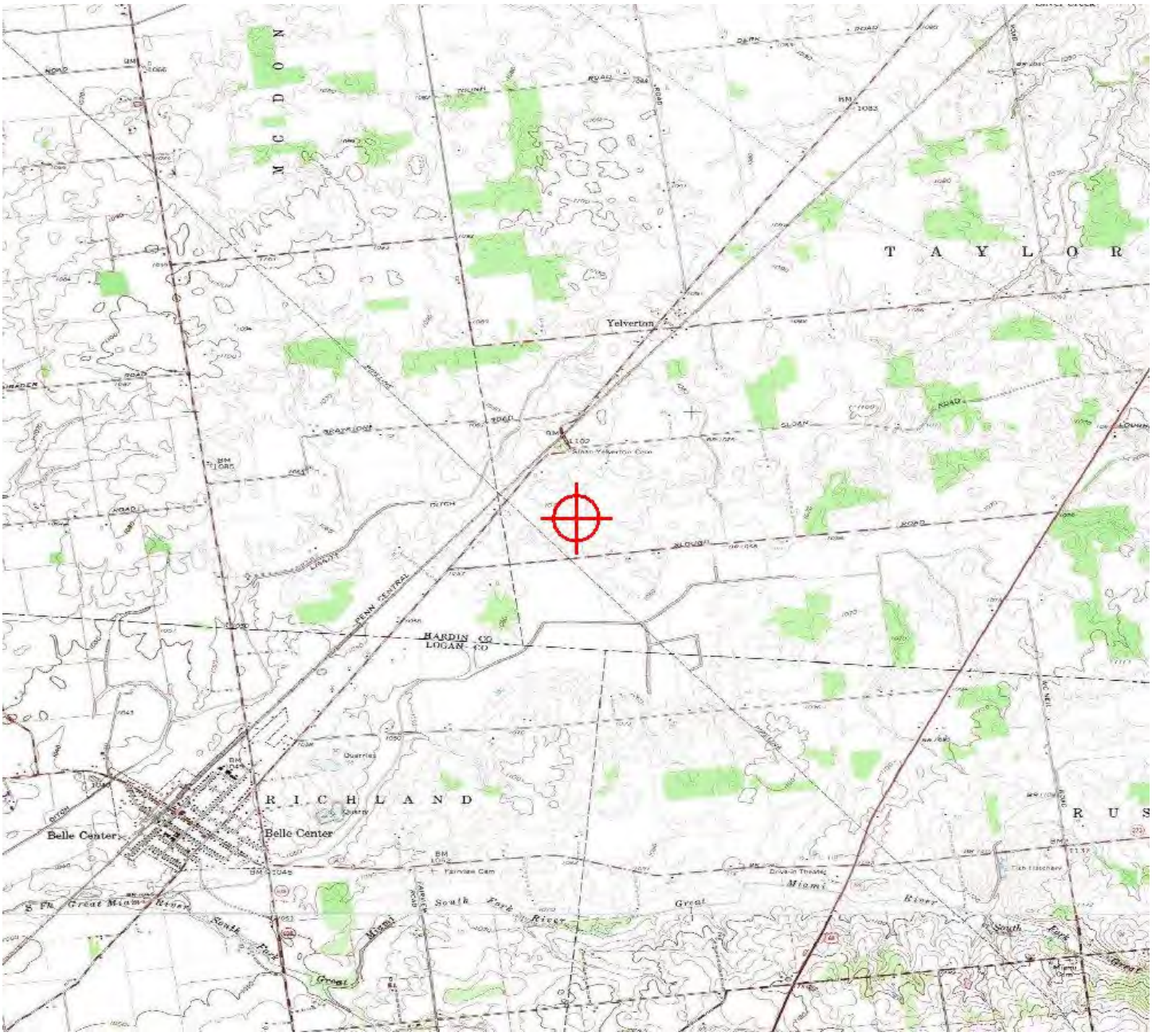
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1678-OE



Sectional Map for ASN 2016-WTE-1678-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1679-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T193
Location:	Roundhead, OH
Latitude:	40-34-19.08N NAD 83
Longitude:	83-43-09.62W
Heights:	1086 feet site elevation (SE) 492 feet above ground level (AGL) 1578 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
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See attachment for additional condition(s) or information.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1679-OE.

Signature Control No: 284652017-300833851 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
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The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

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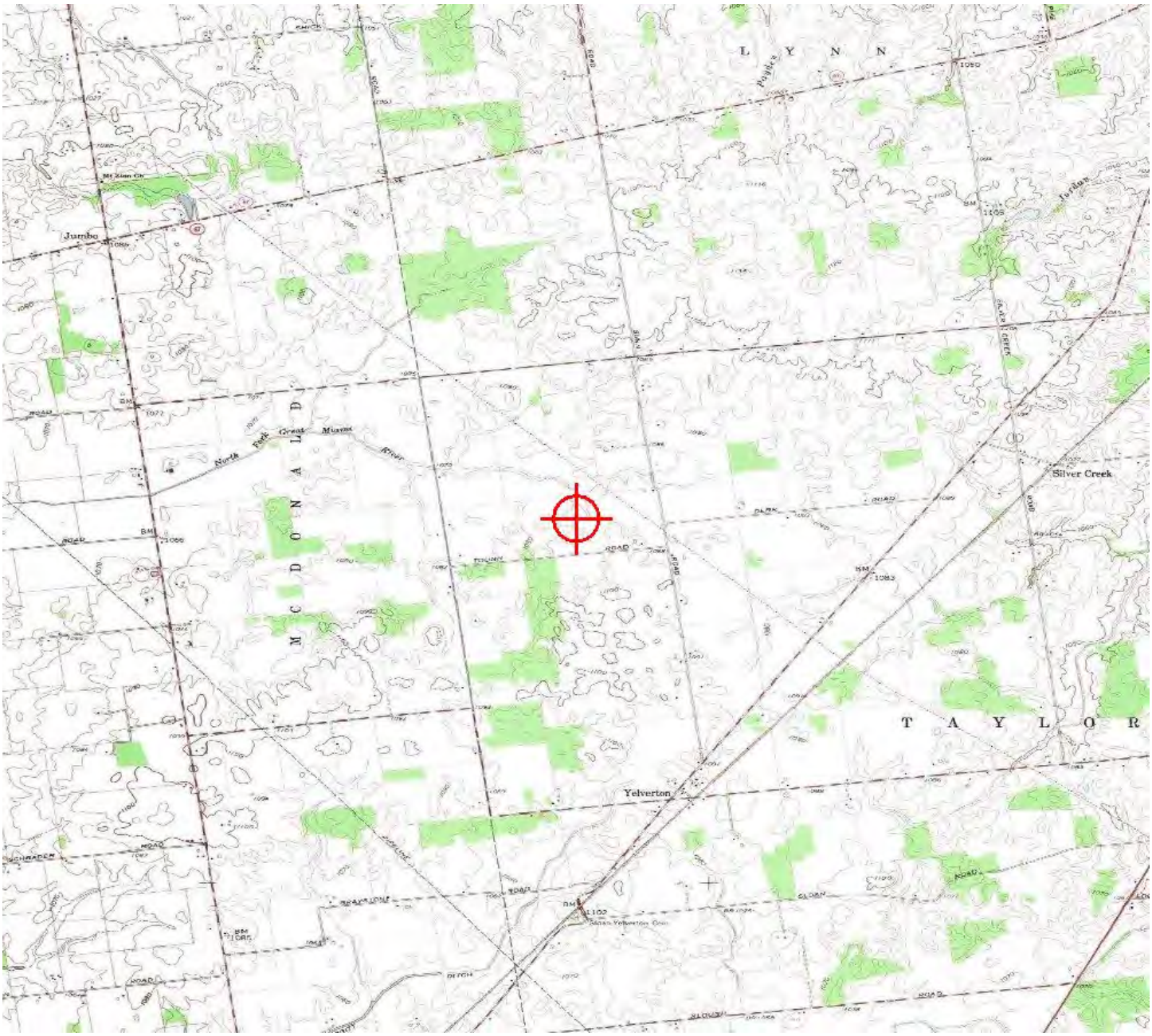
TOPO Map for ASN 2016-WTE-1679-OE



Sectional Map for ASN 2016-WTE-1679-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1680-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

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Signature Control No: 284652018-300833854 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

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ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
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2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

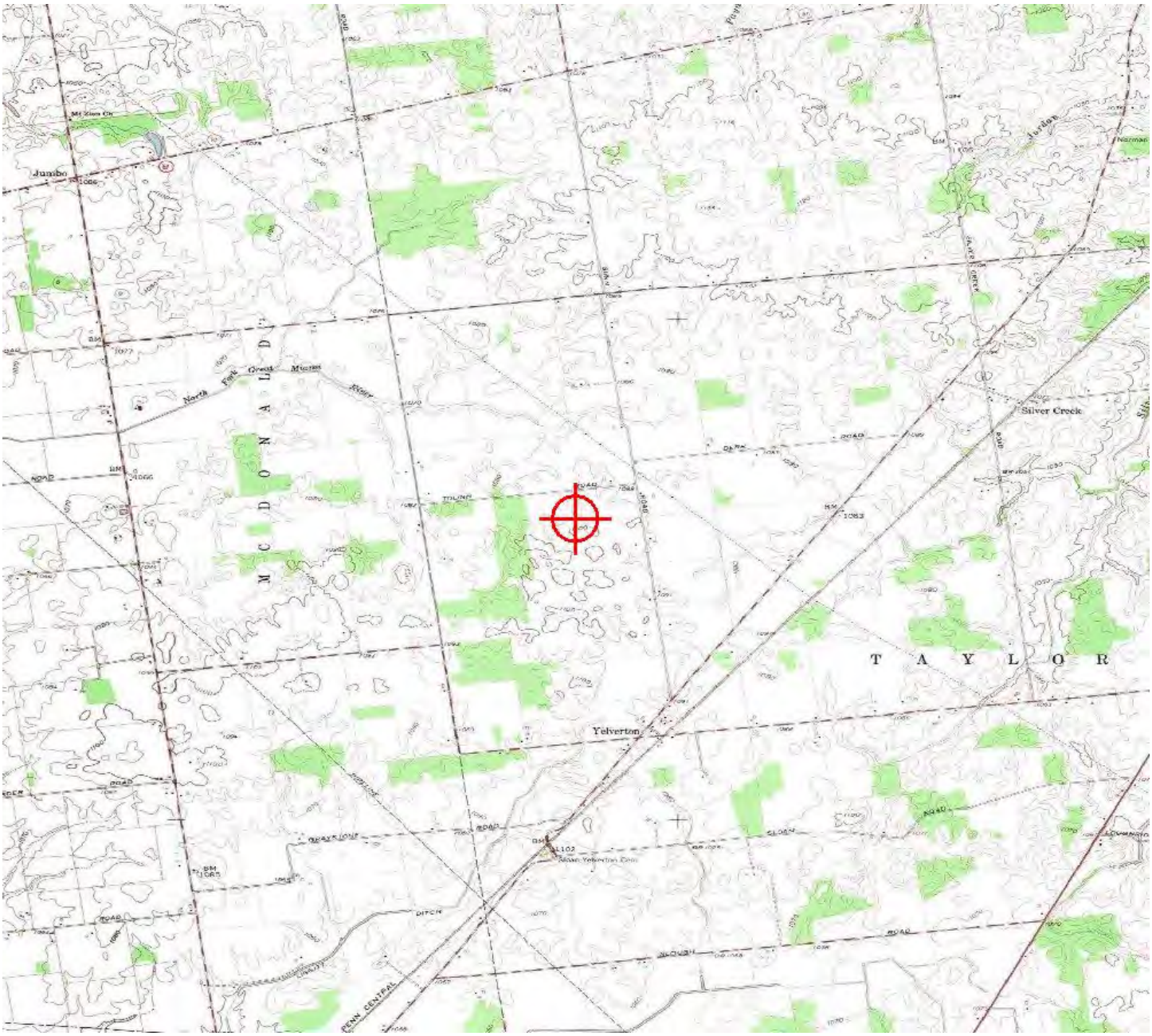
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1680-OE



Sectional Map for ASN 2016-WTE-1680-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1693-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T195
Location:	Roundhead, OH
Latitude:	40-29-47.11N NAD 83
Longitude:	83-42-47.96W
Heights:	1098 feet site elevation (SE) 492 feet above ground level (AGL) 1590 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1693-OE.

Signature Control No: 284652031-300833925 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
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Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

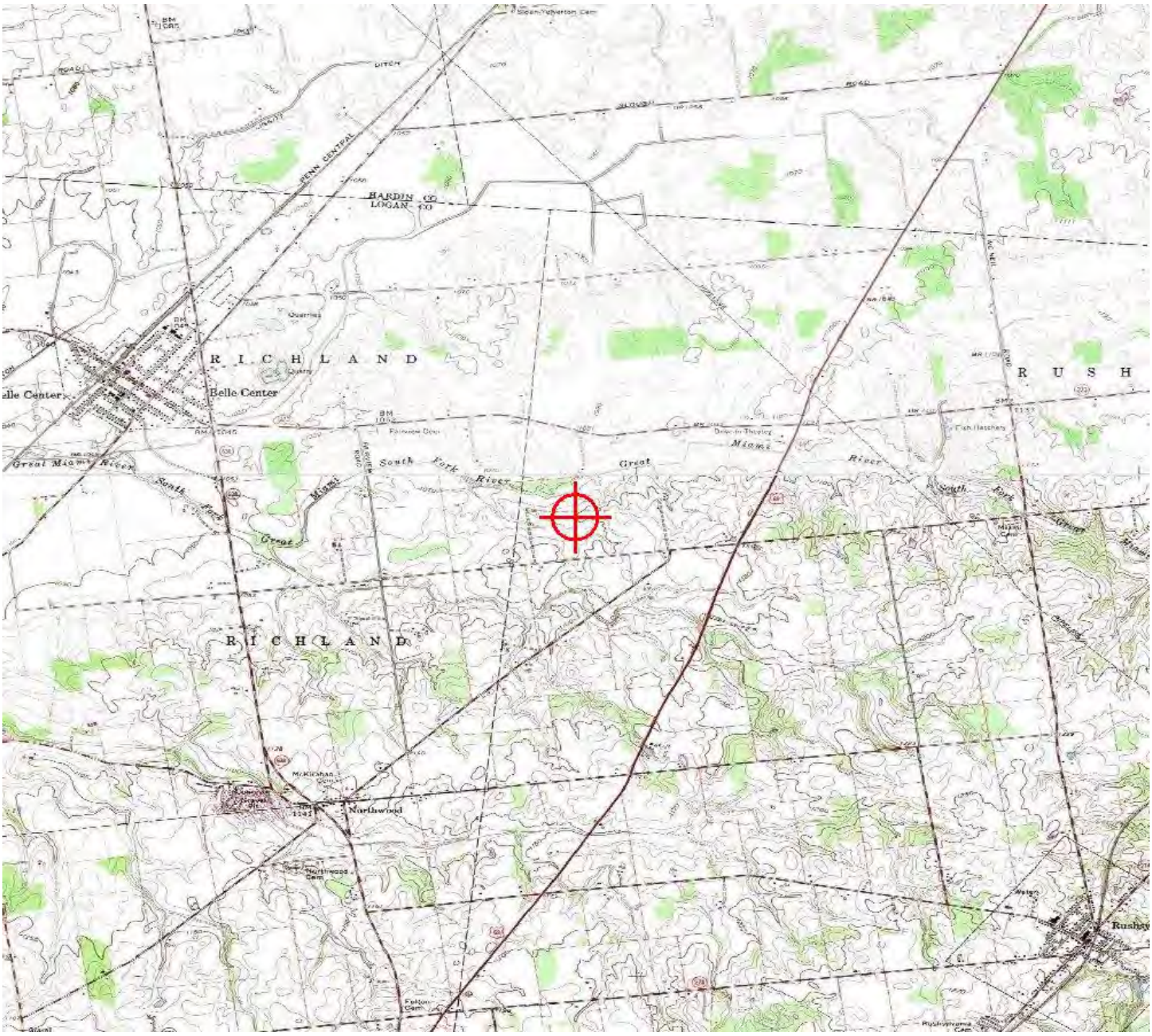
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

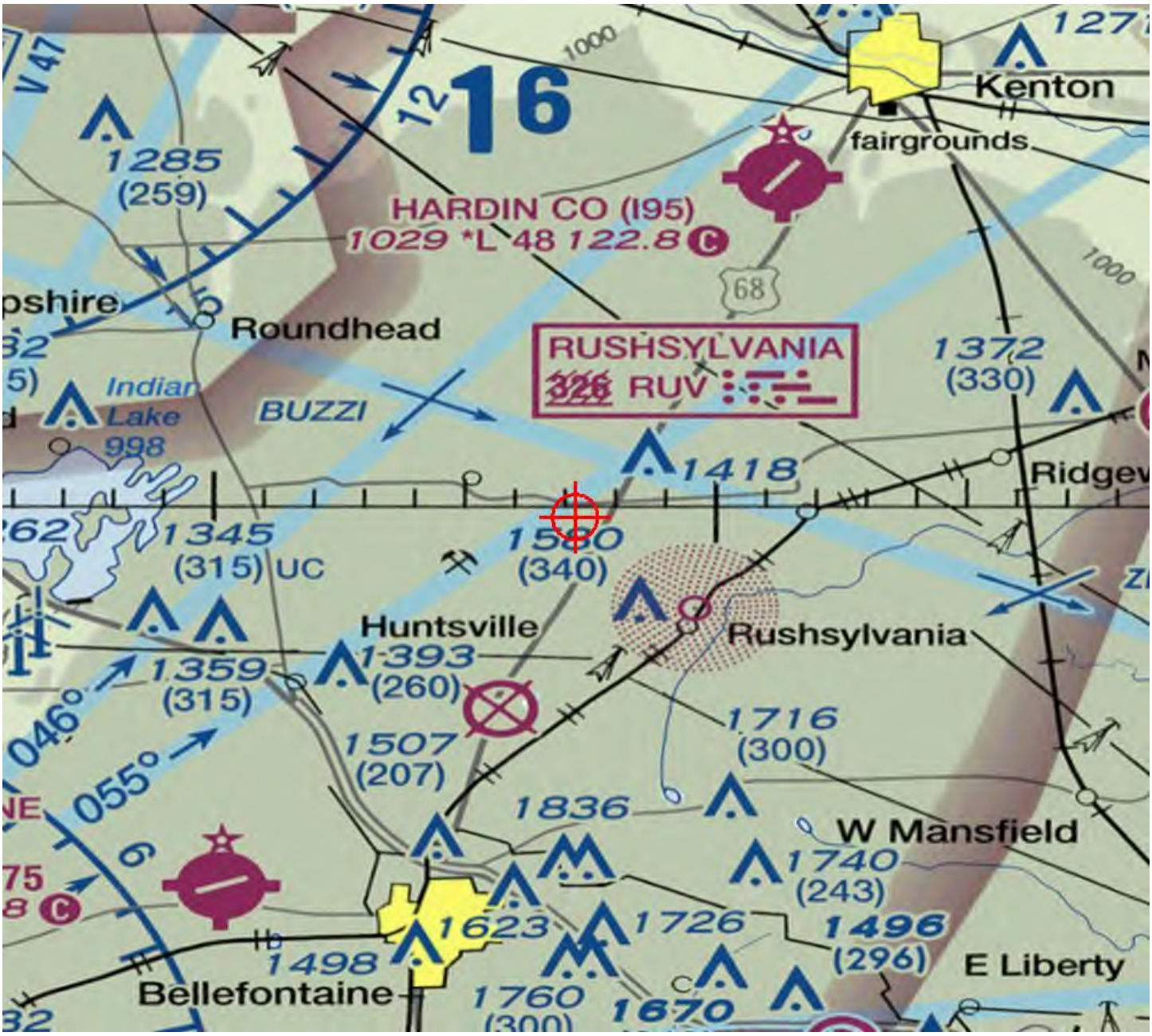
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1693-OE



Sectional Map for ASN 2016-WTE-1693-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1694-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T196
Location:	Roundhead, OH
Latitude:	40-30-46.05N NAD 83
Longitude:	83-42-48.47W
Heights:	1073 feet site elevation (SE) 492 feet above ground level (AGL) 1565 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
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See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1694-OE.

Signature Control No: 284652032-300833964 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

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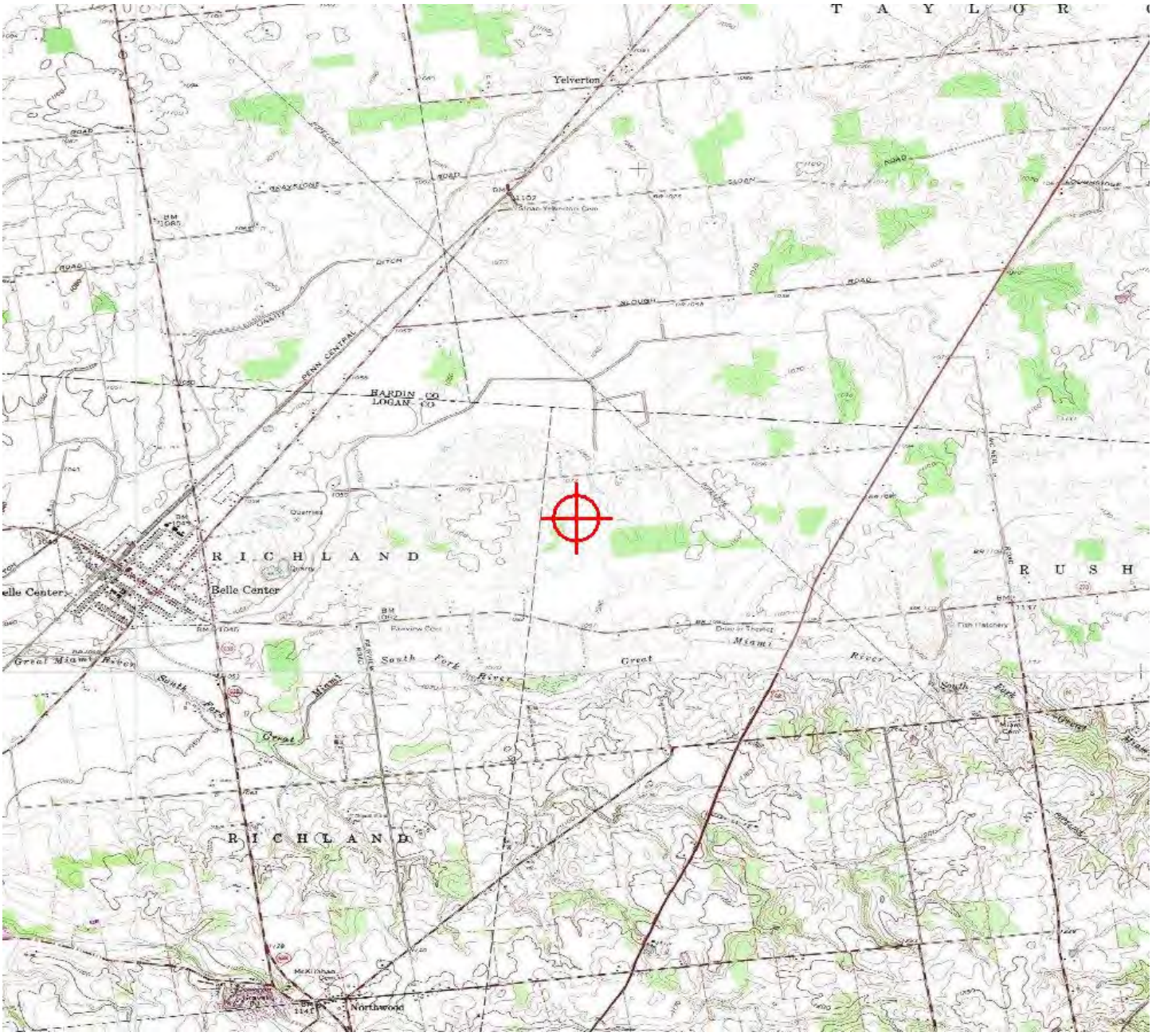
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1694-OE



Sectional Map for ASN 2016-WTE-1694-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1681-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T199
Location:	Roundhead, OH
Latitude:	40-32-01.66N NAD 83
Longitude:	83-42-40.64W
Heights:	1065 feet site elevation (SE) 492 feet above ground level (AGL) 1557 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1681-OE.

Signature Control No: 284652019-300833857 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
2016-WTE-1602-OE / 23 ft.
2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
2016-WTE-1641-OE / 7 ft.
2016-WTE-1644-OE / 27 ft.
2016-WTE-1648-OE / 60 ft.
2016-WTE-1649-OE / 71 ft.
2016-WTE-1650-OE / 72 ft.
2016-WTE-1651-OE / 89 ft.
2016-WTE-1653-OE / 82 ft.
2016-WTE-1654-OE / 13 ft.
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2016-WTE-1656-OE / 45 ft.
2016-WTE-1657-OE / 115 ft.
2016-WTE-1658-OE / 13 ft.
2016-WTE-1660-OE / 108 ft.
2016-WTE-1661-OE / 76 ft.

2016-WTE-1662-OE / 116 ft.
2016-WTE-1665-OE / 87 ft.
2016-WTE-1666-OE / 126 ft.
2016-WTE-1668-OE / 40 ft.
2016-WTE-1670-OE / 34 ft.
2016-WTE-1673-OE / 46 ft.
2016-WTE-1674-OE / 185 ft.
2016-WTE-1675-OE / 174 ft.
2016-WTE-1677-OE / 177 ft.
2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

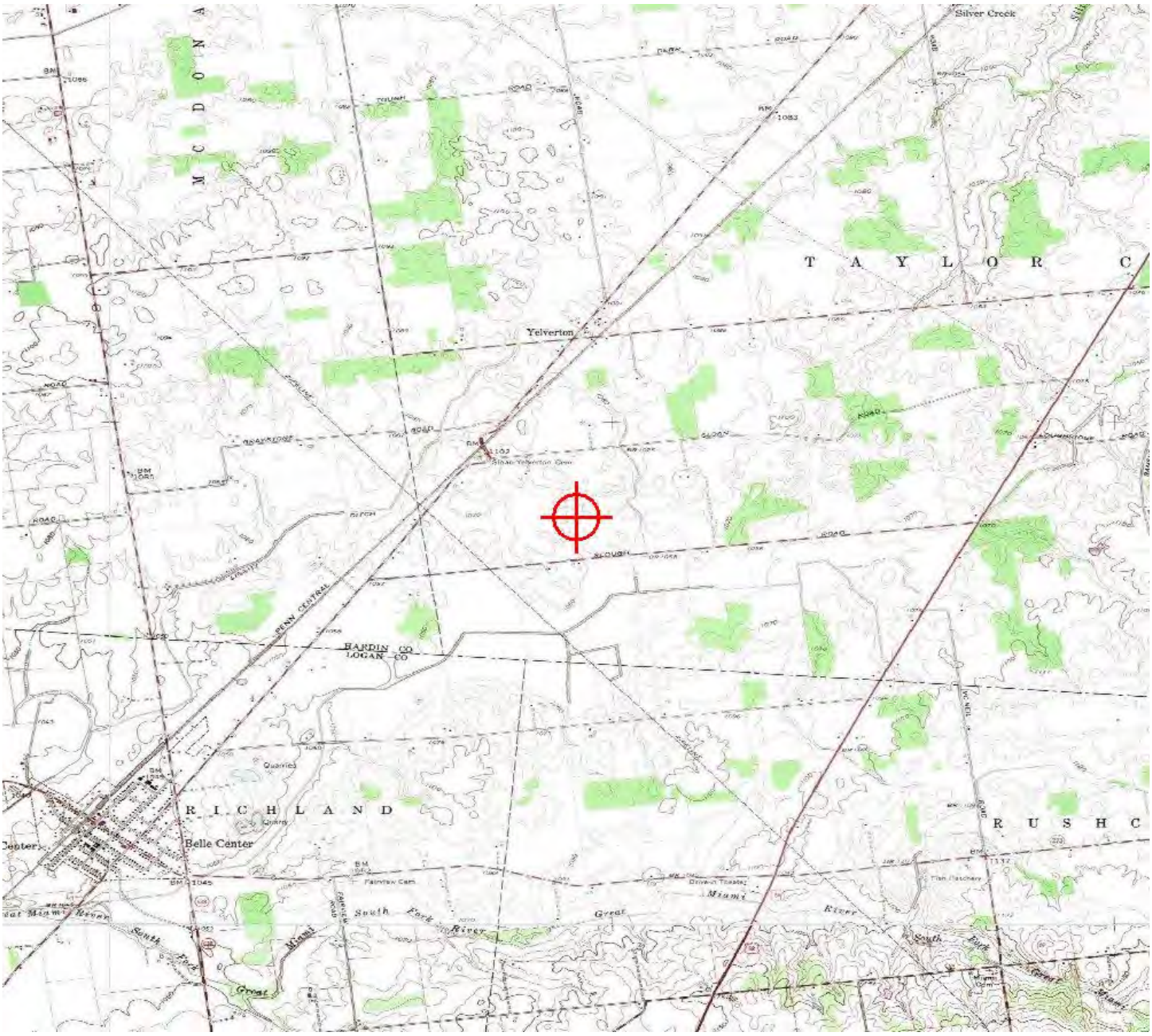
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1681-OE



Sectional Map for ASN 2016-WTE-1681-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1695-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T201
Location:	Roundhead, OH
Latitude:	40-30-38.53N NAD 83
Longitude:	83-42-33.21W
Heights:	1078 feet site elevation (SE) 492 feet above ground level (AGL) 1570 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1695-OE.

Signature Control No: 284652033-300833975 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
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2016-WTE-1674-OE / 185 ft.
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2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1695-OE

Sectional Map for ASN 2016-WTE-1695-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1682-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T202
Location:	Roundhead, OH
Latitude:	40-31-29.64N NAD 83
Longitude:	83-42-34.51W
Heights:	1049 feet site elevation (SE) 492 feet above ground level (AGL) 1541 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

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It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1682-OE.

Signature Control No: 284652020-300833860 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
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Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

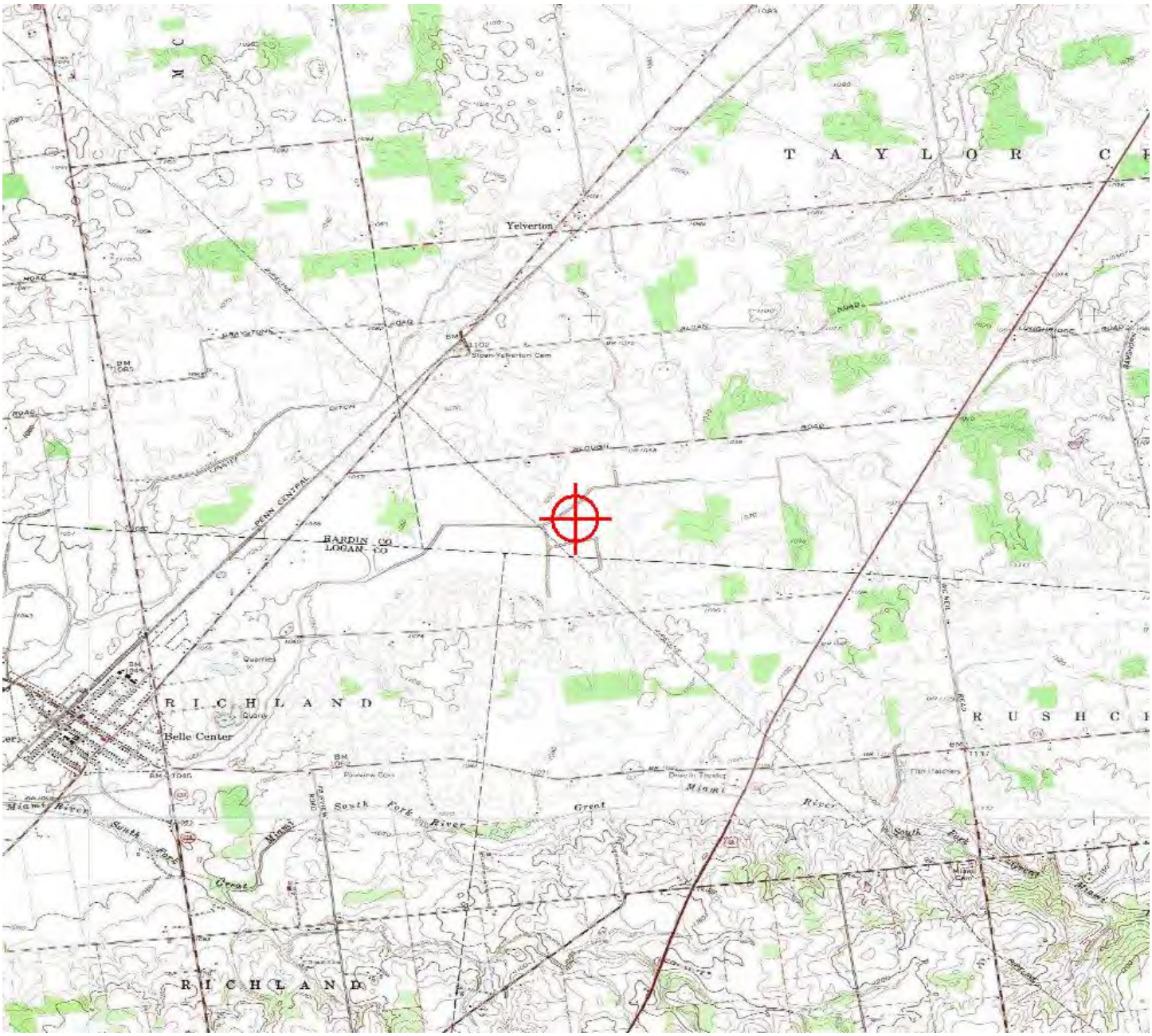
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1682-OE



Sectional Map for ASN 2016-WTE-1682-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1696-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T203
Location:	Roundhead, OH
Latitude:	40-30-31.39N NAD 83
Longitude:	83-42-16.99W
Heights:	1087 feet site elevation (SE)
	492 feet above ground level (AGL)
	1579 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1696-OE.

Signature Control No: 284652034-300833978 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
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IFR - instrument flight rules
NM - nautical miles
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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

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Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

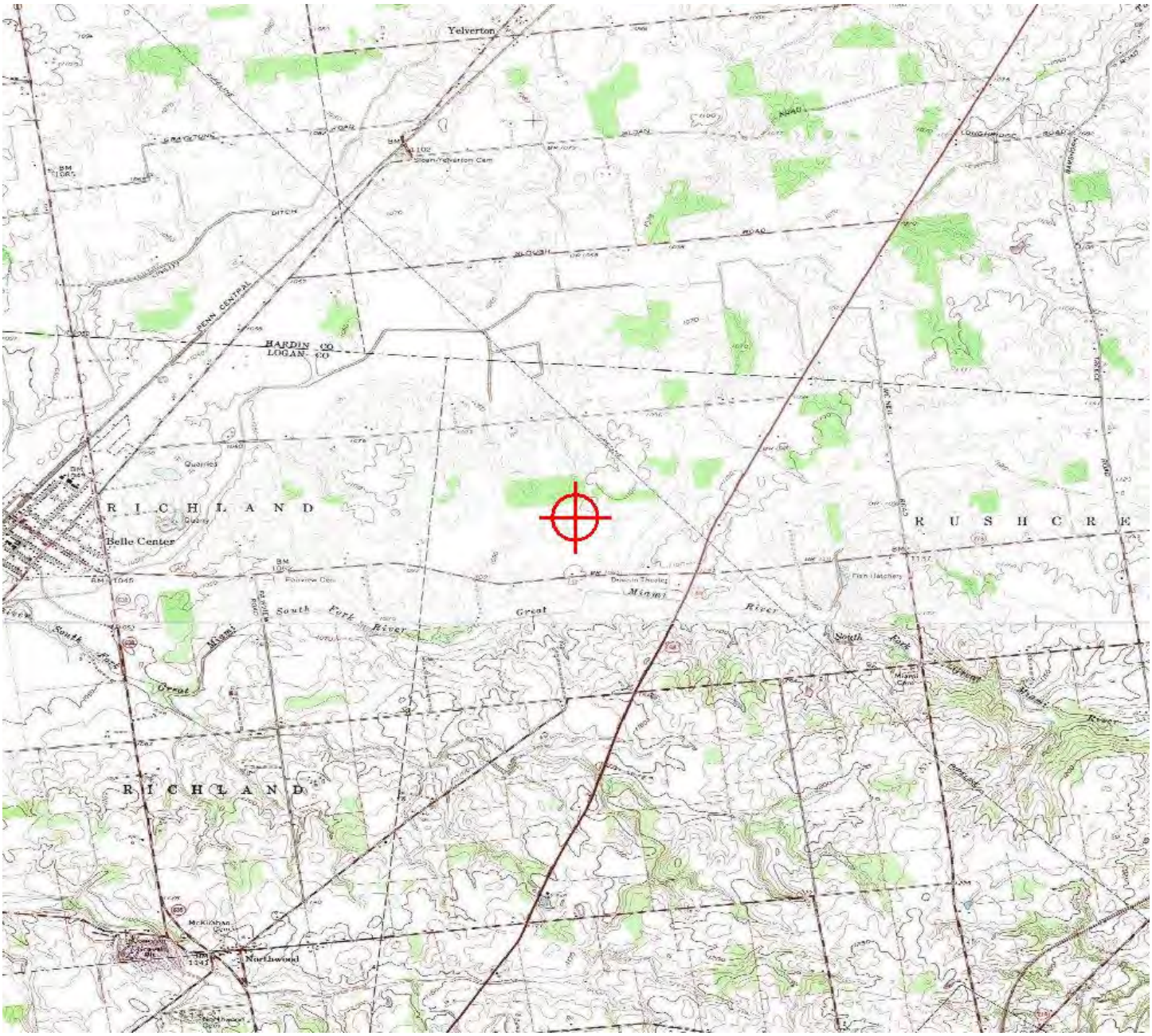
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

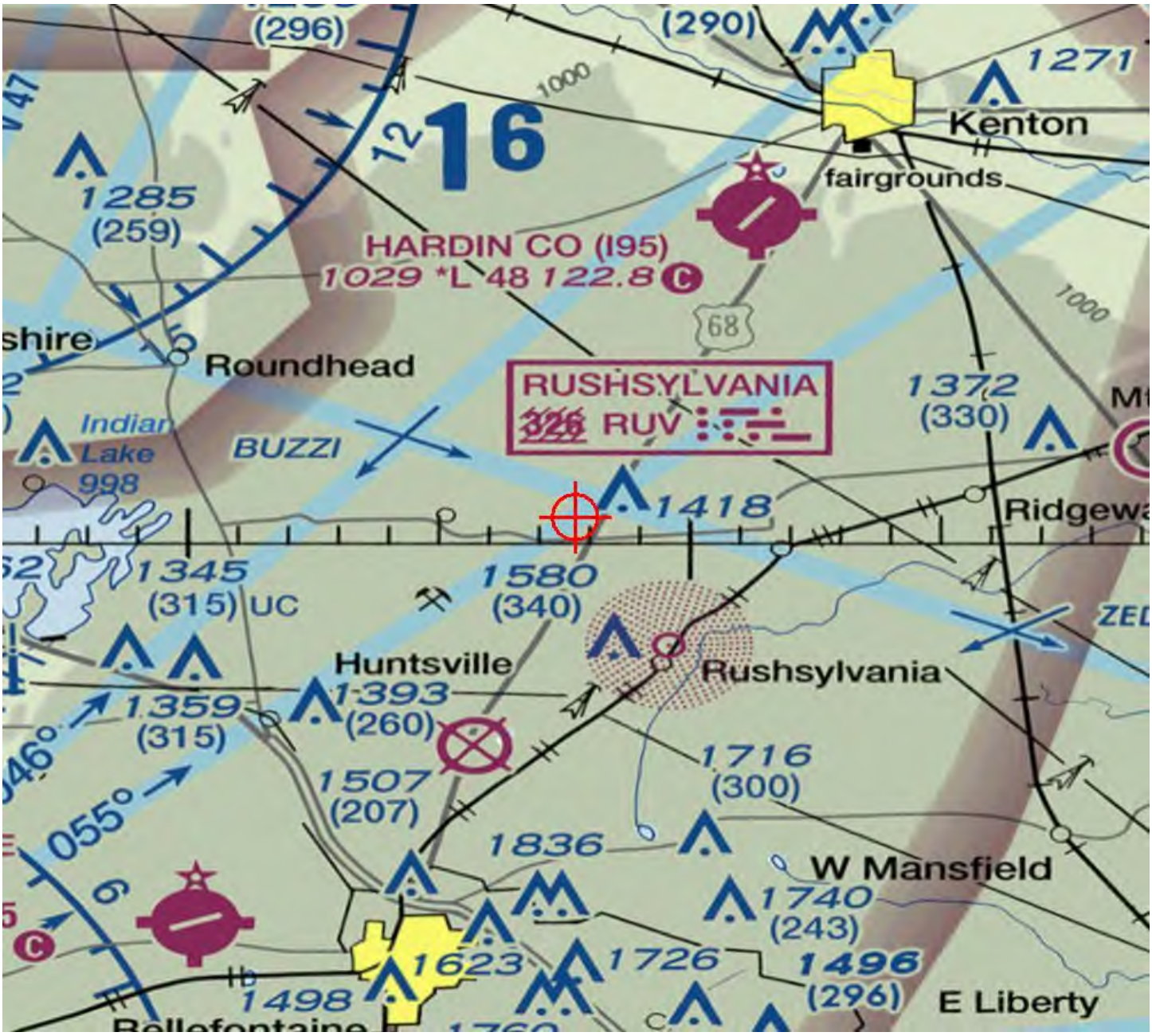
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1696-OE



Sectional Map for ASN 2016-WTE-1696-OE



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Federal Aviation Administration
Southwest Regional Office
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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1697-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T204
Location:	Roundhead, OH
Latitude:	40-30-50.02N NAD 83
Longitude:	83-42-16.30W
Heights:	1086 feet site elevation (SE) 492 feet above ground level (AGL) 1578 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
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See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1697-OE.

Signature Control No: 284652035-300833981 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

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The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

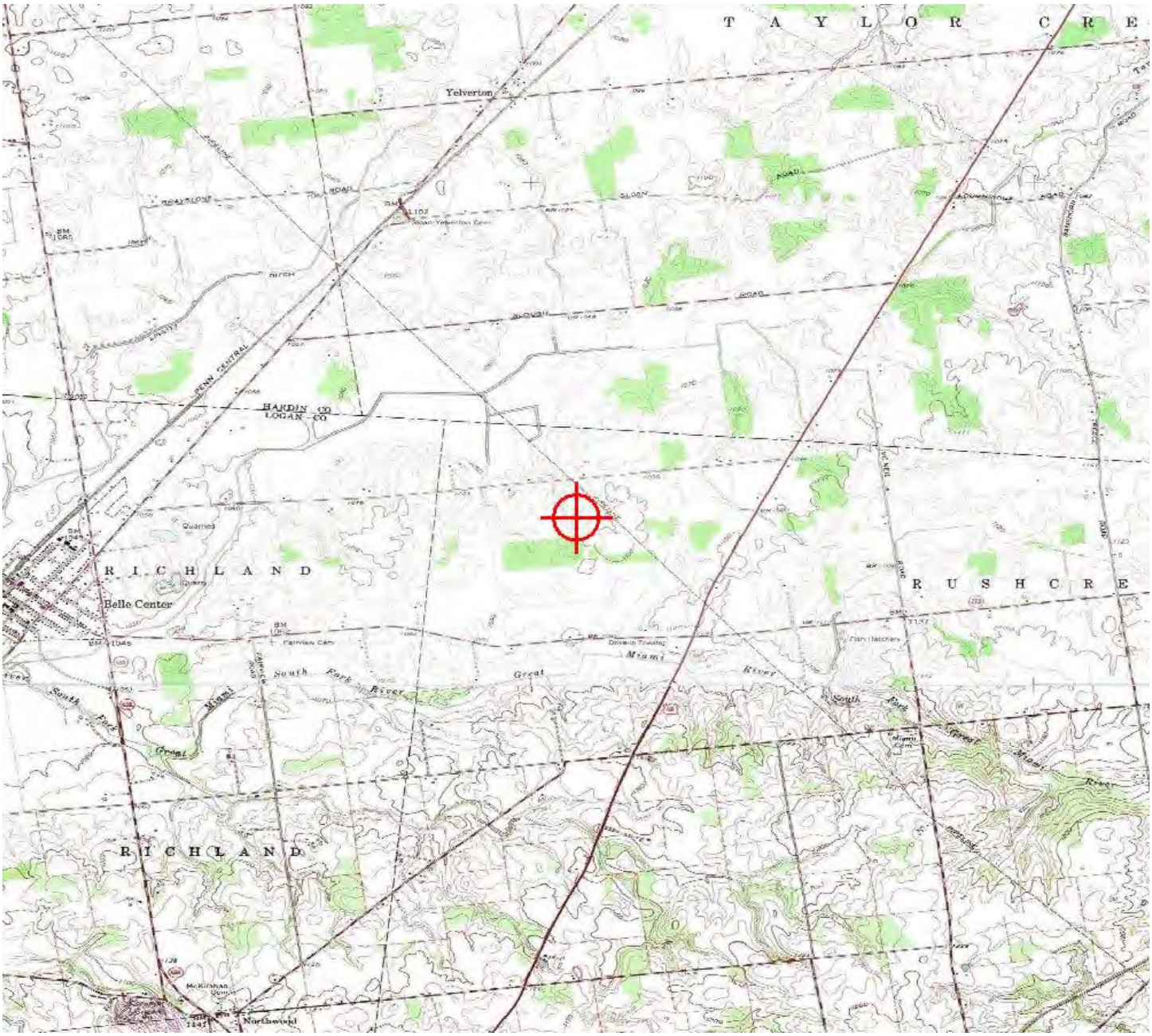
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

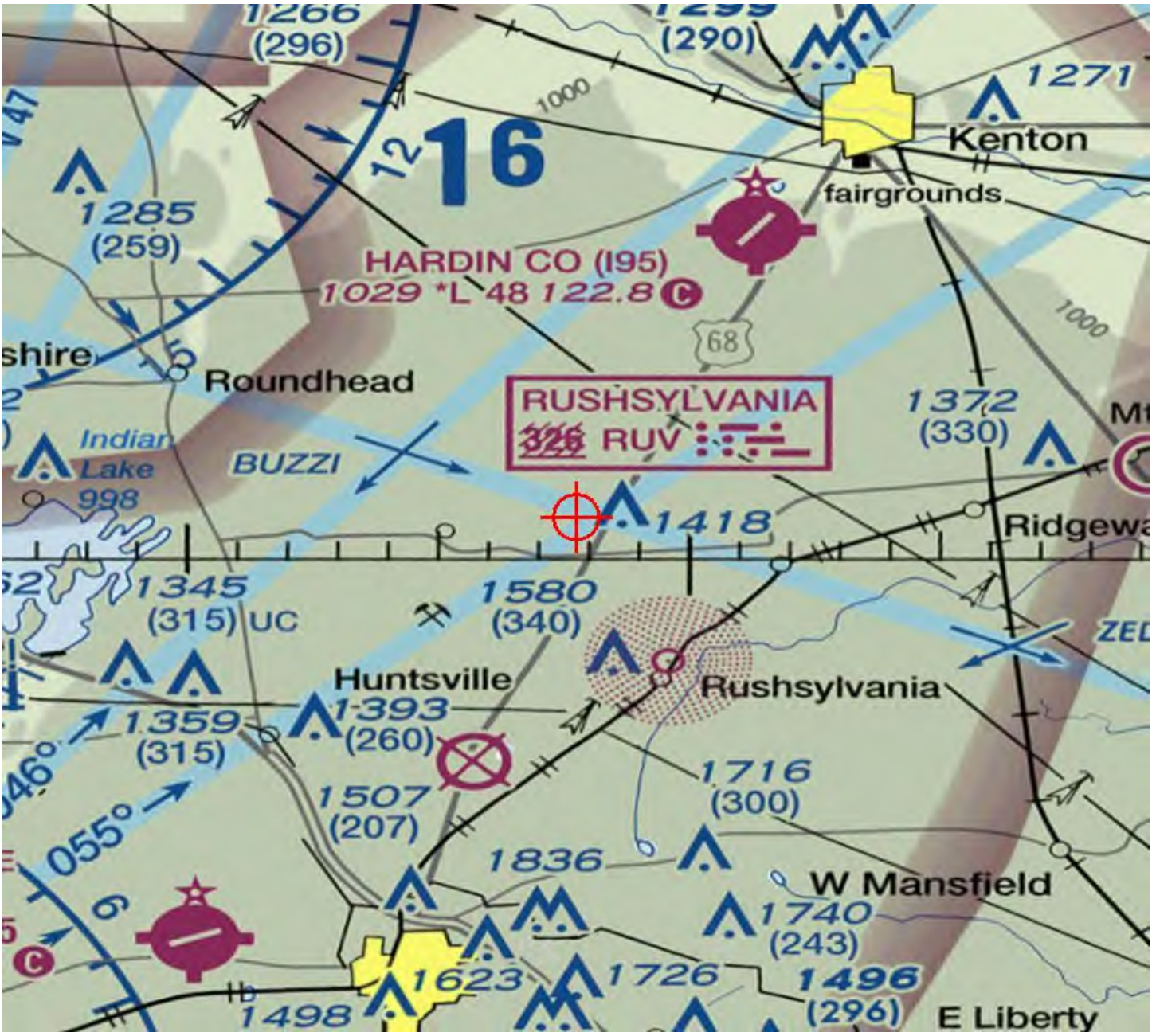
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1697-OE



Sectional Map for ASN 2016-WTE-1697-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1683-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T205
Location:	Roundhead, OH
Latitude:	40-31-21.27N NAD 83
Longitude:	83-42-09.78W
Heights:	1070 feet site elevation (SE) 492 feet above ground level (AGL) 1562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1683-OE.

Signature Control No: 284652021-300833864 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
2016-WTE-1602-OE / 23 ft.
2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
2016-WTE-1641-OE / 7 ft.
2016-WTE-1644-OE / 27 ft.
2016-WTE-1648-OE / 60 ft.
2016-WTE-1649-OE / 71 ft.
2016-WTE-1650-OE / 72 ft.
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2016-WTE-1670-OE / 34 ft.
2016-WTE-1673-OE / 46 ft.
2016-WTE-1674-OE / 185 ft.
2016-WTE-1675-OE / 174 ft.
2016-WTE-1677-OE / 177 ft.
2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

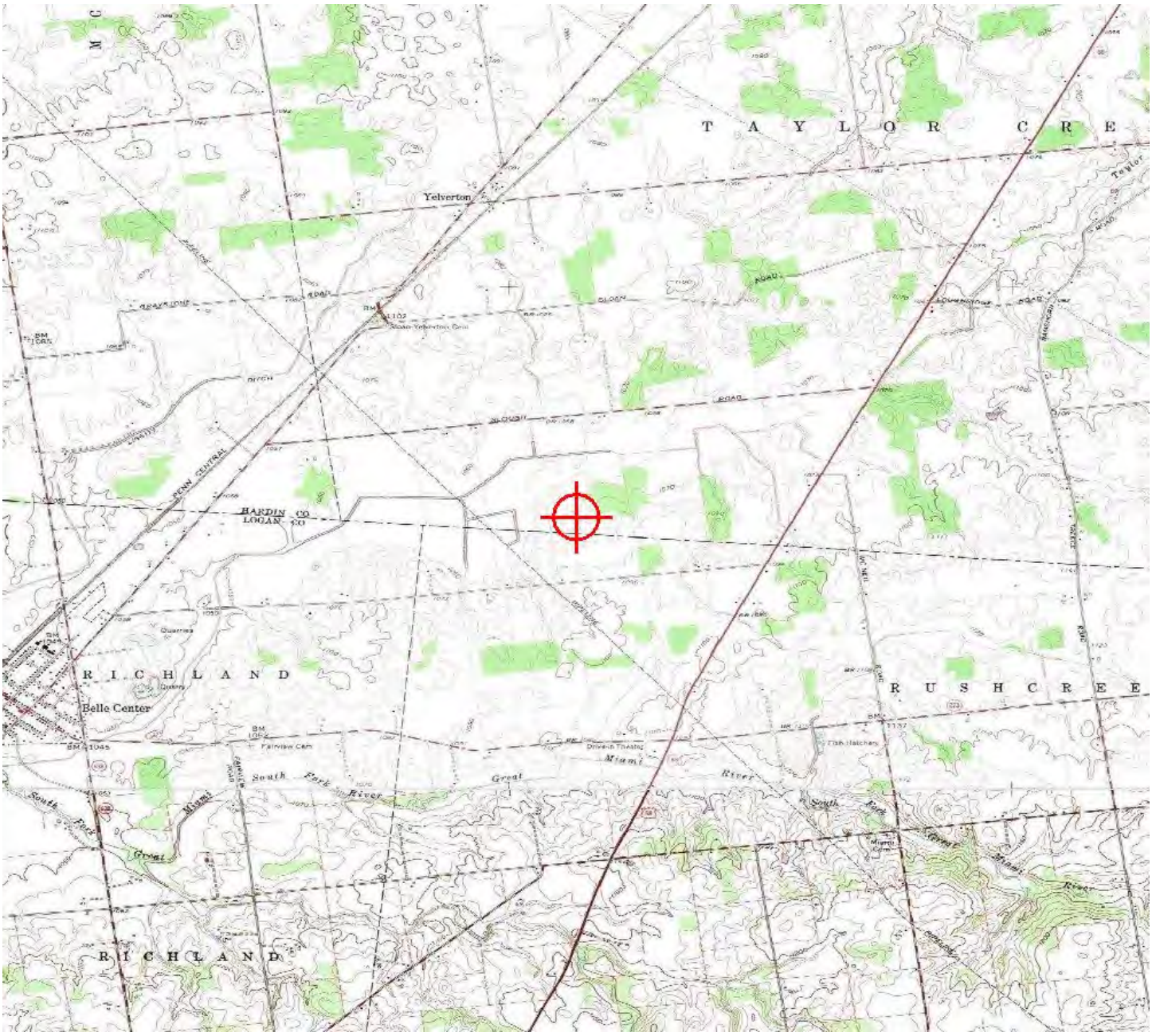
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1683-OE



Sectional Map for ASN 2016-WTE-1683-OE

Mail Processing Center
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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1698-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T207
Location:	Roundhead, OH
Latitude:	40-30-25.28N NAD 83
Longitude:	83-42-05.32W
Heights:	1084 feet site elevation (SE) 492 feet above ground level (AGL) 1576 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

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If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1698-OE.

Signature Control No: 284652036-300833984 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

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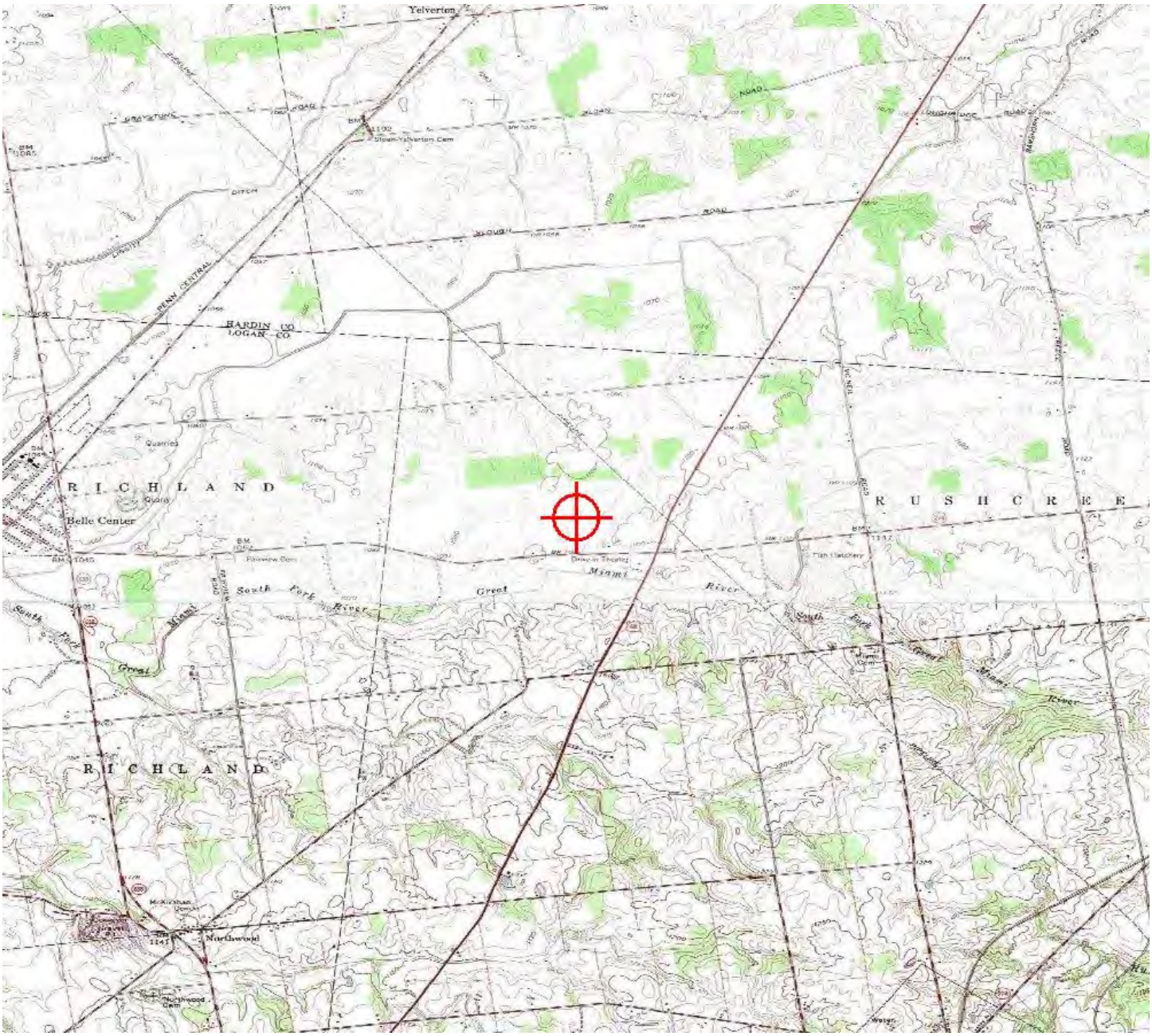
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1698-OE



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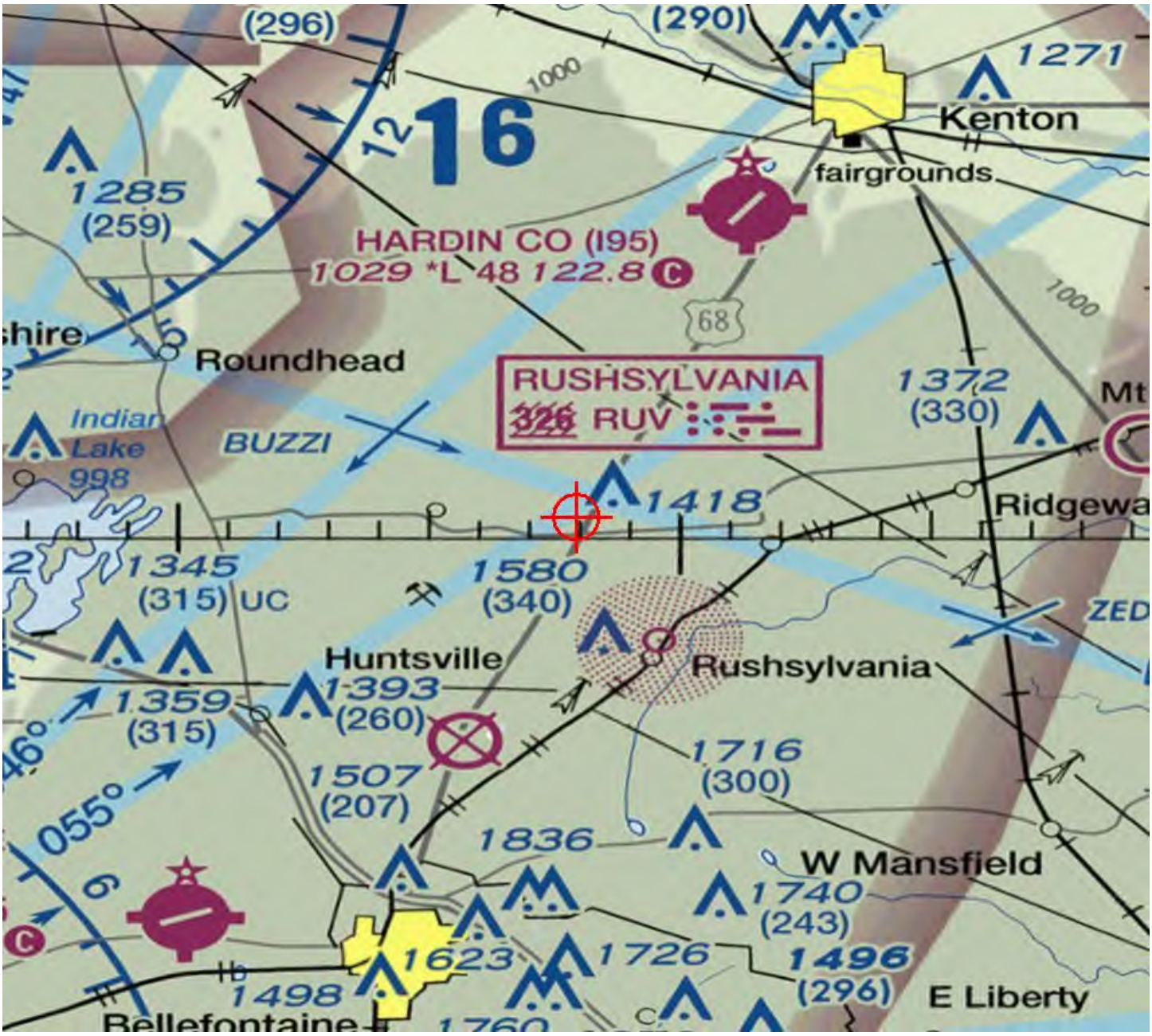

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1699-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T208
Location:	Roundhead, OH
Latitude:	40-31-12.84N NAD 83
Longitude:	83-42-00.22W
Heights:	1085 feet site elevation (SE) 492 feet above ground level (AGL) 1577 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
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See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1699-OE.

Signature Control No: 284652037-300833987 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
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2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

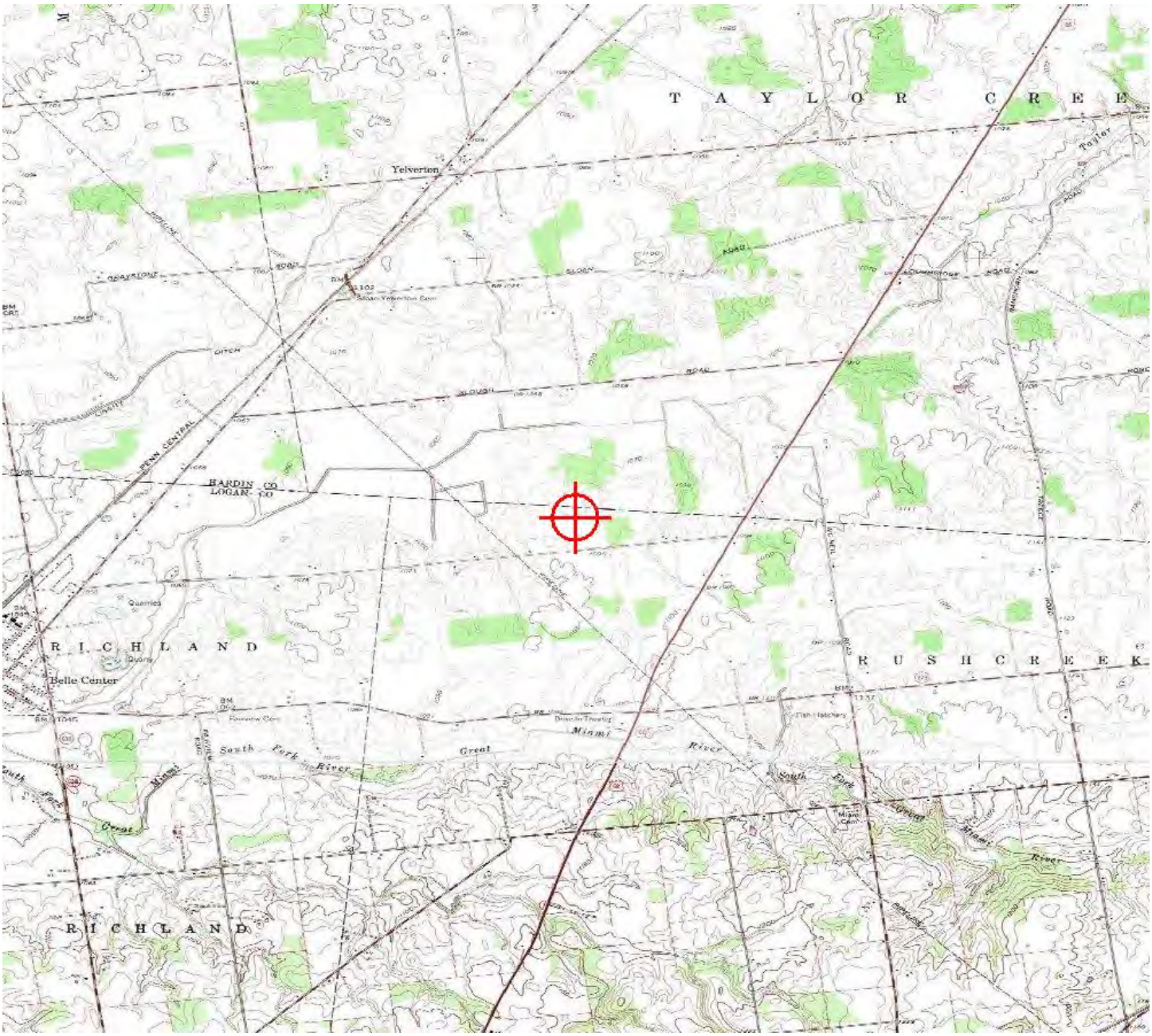
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1699-OE



Sectional Map for ASN 2016-WTE-1699-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1700-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T209
Location:	Roundhead, OH
Latitude:	40-30-55.58N NAD 83
Longitude:	83-41-53.75W
Heights:	1097 feet site elevation (SE) 492 feet above ground level (AGL) 1589 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1700-OE.

Signature Control No: 284652038-300833991 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

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The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

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The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

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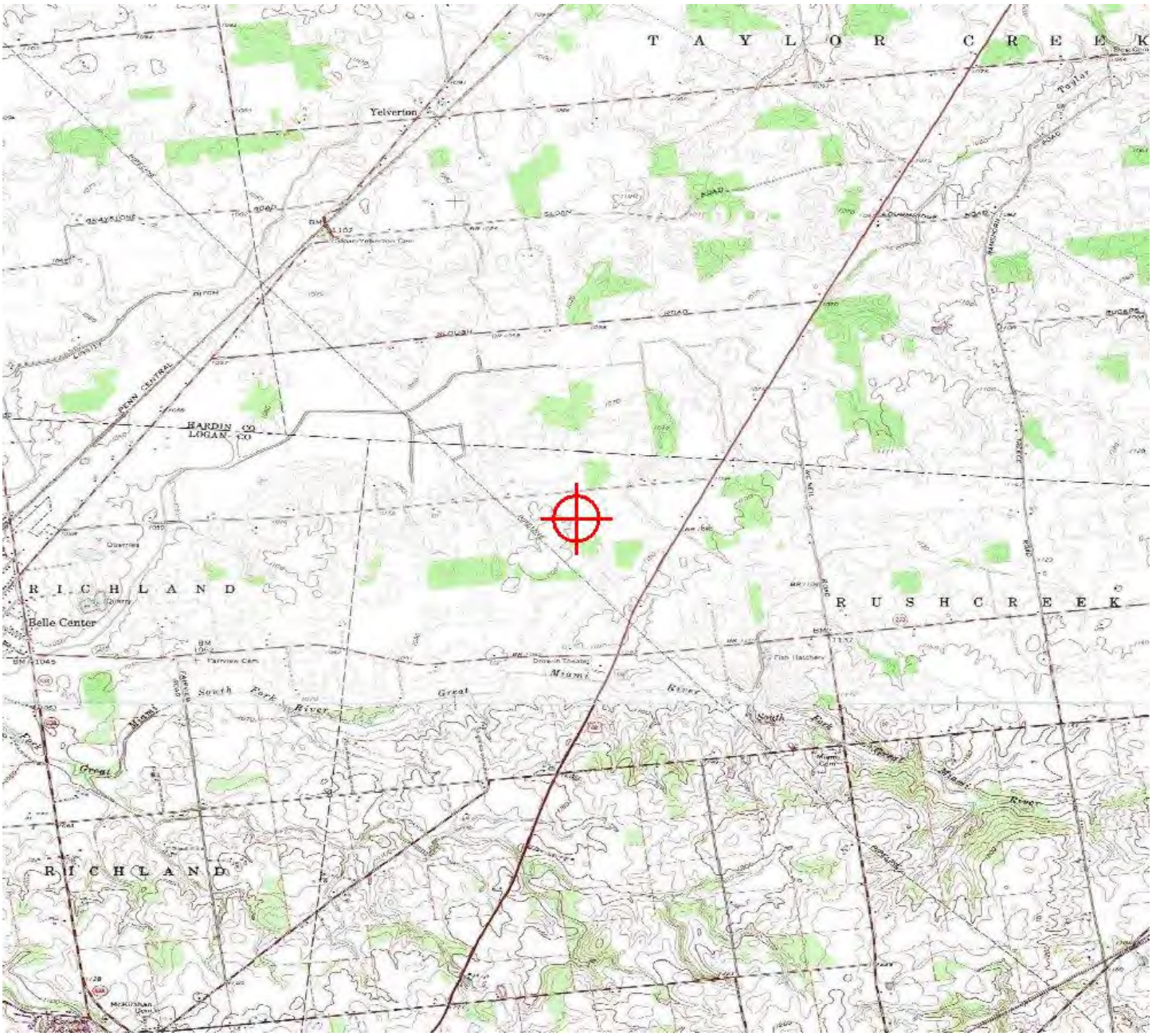
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1700-OE



Sectional Map for ASN 2016-WTE-1700-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1701-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T210
Location:	Roundhead, OH
Latitude:	40-30-46.13N NAD 83
Longitude:	83-41-45.76W
Heights:	1083 feet site elevation (SE) 492 feet above ground level (AGL) 1575 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

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__X__ At least 10 days prior to start of construction (7460-2, Part 1)
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See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1701-OE.

Signature Control No: 284652039-300833993 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

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2016-WTE-1650-OE / 72 ft.
2016-WTE-1651-OE / 89 ft.
2016-WTE-1653-OE / 82 ft.
2016-WTE-1654-OE / 13 ft.
2016-WTE-1655-OE / 64 ft.
2016-WTE-1656-OE / 45 ft.
2016-WTE-1657-OE / 115 ft.
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2016-WTE-1660-OE / 108 ft.
2016-WTE-1661-OE / 76 ft.

2016-WTE-1662-OE / 116 ft.
2016-WTE-1665-OE / 87 ft.
2016-WTE-1666-OE / 126 ft.
2016-WTE-1668-OE / 40 ft.
2016-WTE-1670-OE / 34 ft.
2016-WTE-1673-OE / 46 ft.
2016-WTE-1674-OE / 185 ft.
2016-WTE-1675-OE / 174 ft.
2016-WTE-1677-OE / 177 ft.
2016-WTE-1678-OE / 20 ft.
2016-WTE-1679-OE / 180 ft.
2016-WTE-1680-OE / 171 ft.
2016-WTE-1681-OE / 41 ft.
2016-WTE-1683-OE / 3 ft.

Section 77.17(a)(4): A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the MOCA. All of the proposals associated with this project would exceed this obstruction standard as noted:

Victor Airway 416-542: Would increase the MOCA between the Rosewood (ROD) VORTAC to the LAWTO intersection from 2500 to 2600 ft. MSL.

The study was not circularized for public comment because current FAA obstruction evaluation policy does not require circularization of those proposals that exceed Section 77.17(a)(2) and are not located within an airport's visual flight rules (VFR) traffic pattern airspace. The proposed structure would be located outside the traffic pattern airspace for I95. Additionally, circularization is not required for the MOCA increase identified above as that impact requires FAA comment only.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures other than those noted above. Further study indicated that the MOCA increase noted above would not create a substantial adverse effect on air traffic control operations.

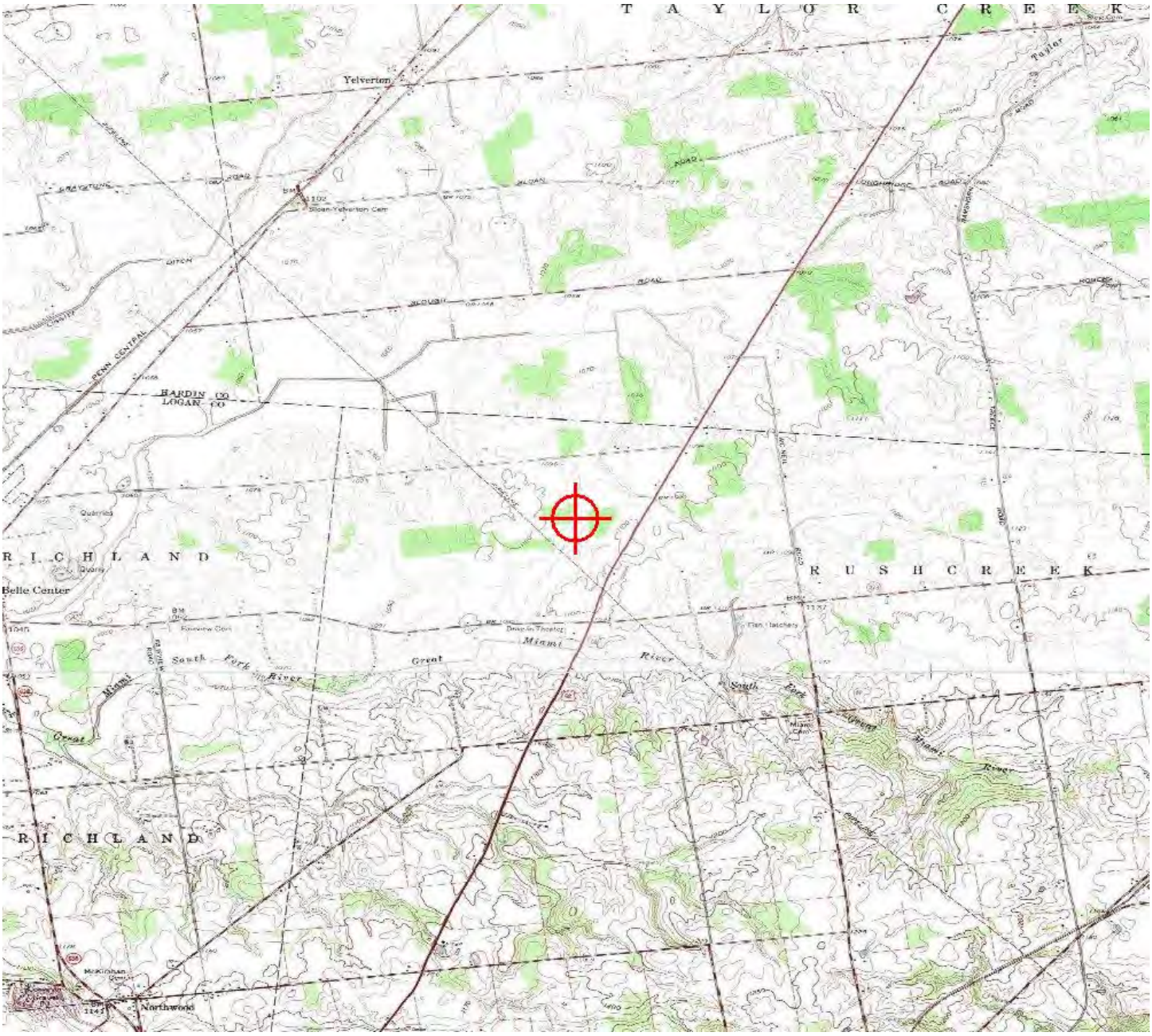
Study for possible VFR effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at I95 or any other known public-use or military airports. At 492 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

NOTE: All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2016-WTE-1701-OE



Sectional Map for ASN 2016-WTE-1701-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2016-WTE-1603-OE

Issued Date: 08/03/2016

Jeff McKee
Scioto Ridge
1251 Waterfront Pl
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine T-11
Location:	Roundhead, OH
Latitude:	40-31-43.51N NAD 83
Longitude:	83-42-18.49W
Heights:	1047 feet site elevation (SE)
	492 feet above ground level (AGL)
	1539 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 L, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 02/03/2018 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before September 02, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 12, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-WTE-1603-OE.

Signature Control No: 284651940-300833542 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

ABBREVIATIONS

AGL - above ground level
ARP - Airport Reference Point
ASN - Aeronautical Study Number
IFR - instrument flight rules
NM - nautical miles
MOCA - minimum obstruction clearance altitude
MSL - mean sea level
VFR - visual flight rules

The proposed wind turbines noted in this letter are part of a proposed wind farm currently consisting of 105 proposed structures. The ASNs for these proposals are 2016-WTE-1597 thru 1701-OE. The proposed wind turbines would be located approximately 3.5 to 8.7 NM west and southwest of the ARP for the Hardin County Airport (I95) in Kenton, Ohio. The determinations for each of the proposals will be available upon issuance on the website, http://oeaaa.faa.gov.

OBSTRUCTION STANDARD(S) EXCEEDED

Section 77.17(a)(2): A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The proposals would exceed as noted as applied to I95:

2016-WTE-1597-OE / 130 ft.
2016-WTE-1598-OE / 83 ft.
2016-WTE-1599-OE / 105 ft.
2016-WTE-1600-OE / 72 ft.
2016-WTE-1601-OE / 27 ft.
2016-WTE-1602-OE / 23 ft.
2016-WTE-1603-OE / 31 ft.
2016-WTE-1606-OE / 225 ft.
2016-WTE-1641-OE / 7 ft.
2016-WTE-1644-OE / 27 ft.
2016-WTE-1648-OE / 60 ft.
2016-WTE-1649-OE / 71 ft.
2016-WTE-1650-OE / 72 ft.
2016-WTE-1651-OE / 89 ft.
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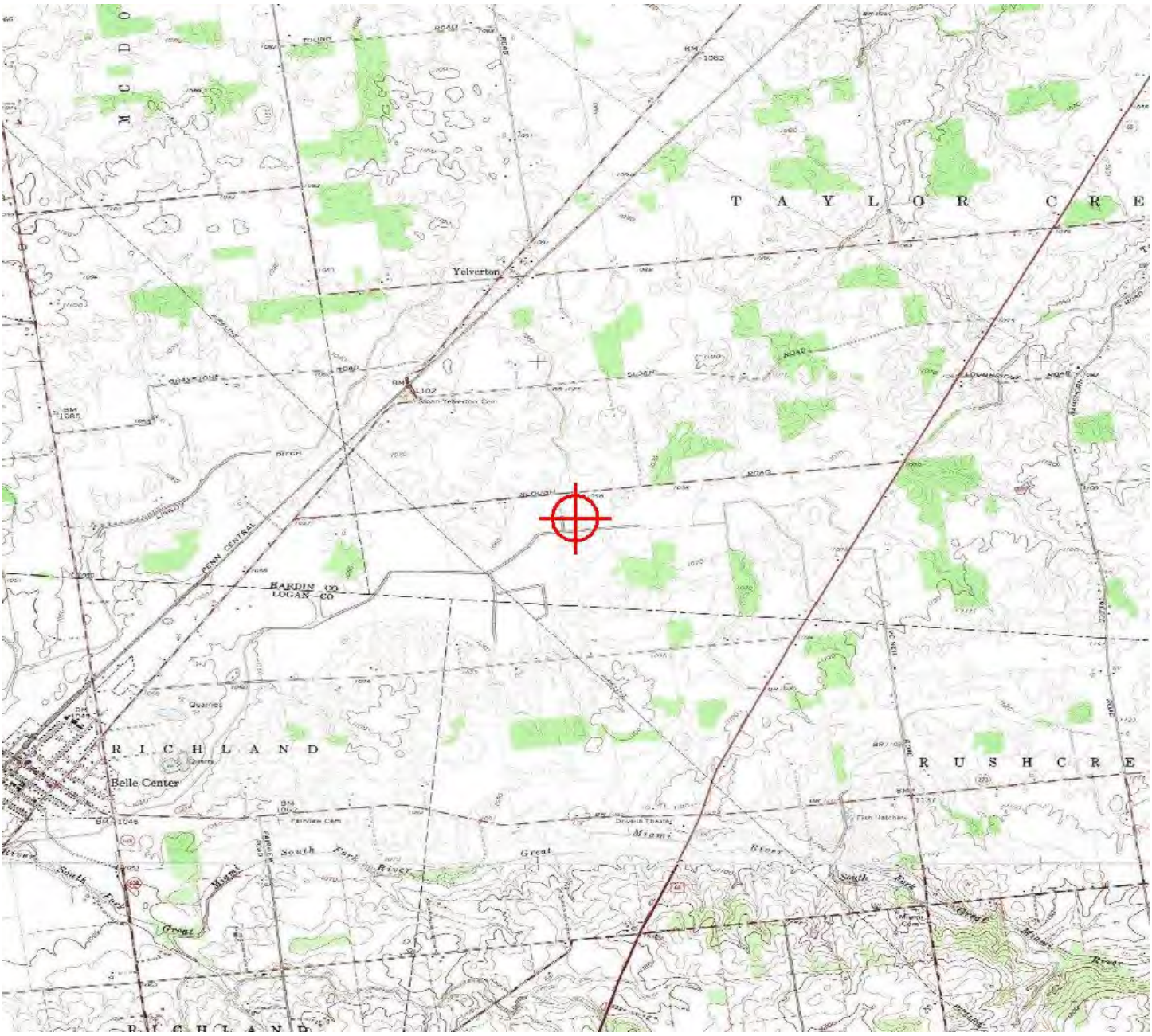
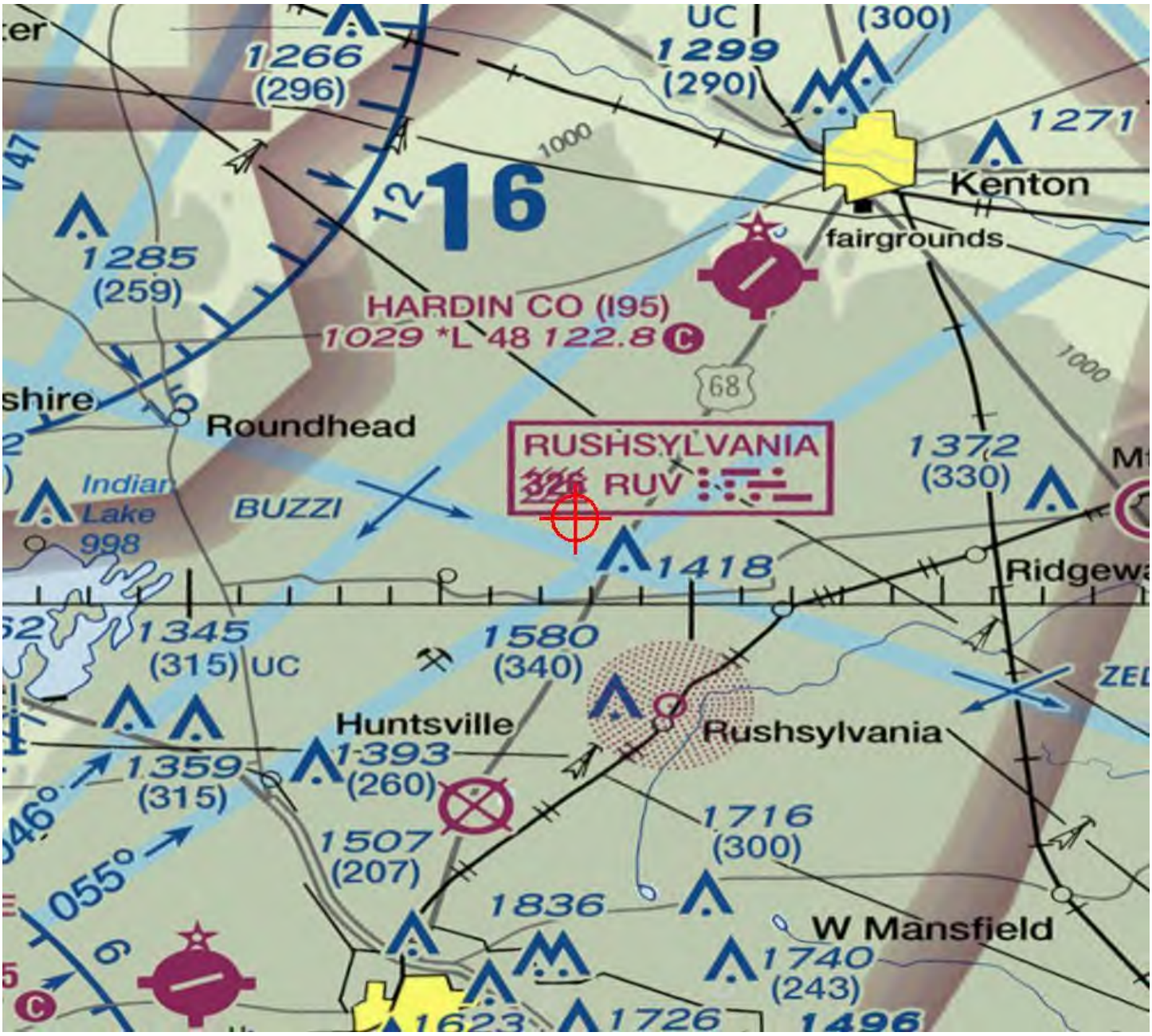


Sectional Map for ASN 2016-WTE-1603-OE



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in

Case No(s). 13-1177-EL-BGN

Summary: Correspondence of Hardin Wind LLC for Commitment 31 Compliance originally filed 9/20/2016 - Part 2 electronically filed by Ms. Donielle M Hunter on behalf of PUCO Staff