

# LARGE FILING SEPARATOR SHEET

CASE NUMBER: 10-2865-EL-BGN

FILE DATE: 09/02/11

SECTION: 2 OF 3

NUMBER OF PAGES: 191

DESCRIPTION OF DOCUMENT:

## FAA DETERMINATIONS OF NO HAZARD -

# BLACK FORK WIND PROJECT

(CONTINUED)



Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2225-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 41
Location:	Shelby, OH
Latitude:	40-55-17.96N NAD 83
Longitude:	82-41-17.17W
Heights:	427 feet above ground level (AGL) 1498 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

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

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

This determination expires on 09/29/2012 unless:

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

- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2225-OE.

**Signature Control No: 137676666-139586437**

( DNH -WT )

*Sheri Edgett-Baron*

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)



## Additional information for ASN 2011-WTE-2225-OE

The proposed construction would be located approximately 2.96 nautical miles (NM) north of the Shelby Community Airport (12G). It would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 178 feet - a height that exceeds 249 feet above ground level within 2.96 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### AERONAUTICAL STUDY FOR POSSIBLE INSTRUMENT FLIGHT RULES (IFR) EFFECT DISCLOSED THE FOLLOWING:

- > The proposed structure would have no effect on any existing or proposed IFR arrival/departure routes, operations, or procedures.
- > The proposed structure would have no effect on any existing or proposed IFR en route routes, operations, or procedures.
- > The proposed structure would have no effect on any existing or proposed IFR minimum flight altitudes.

### AERONAUTICAL STUDY FOR POSSIBLE VISUAL FLIGHT RULES (VFR) EFFECT DISCLOSED THE FOLLOWING:

- > The proposed structure would have no effect on any existing or proposed VFR arrival or departure routes, operations or procedures.
- > The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any known public use or military airports.
- > The proposed structure would not penetrate those altitudes normally considered available to airmen for VFR en route flight.
- > The proposed structure will be appropriately obstruction marked and lighted to make it more conspicuous to airmen flying in VFR weather conditions at night.

The cumulative impact of the proposed structure, when combined with other existing structures is not considered 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.





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2226-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 42
Location:	Shelby, OH
Latitude:	40-55-16.37N NAD 83
Longitude:	82-42-08.17W
Heights:	427 feet above ground level (AGL) 1497 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

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

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2226-OE.

**Signature Control No: 137676669-139587234**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## Additional information for ASN 2011-WTE-2226-OE

The proposed construction would be located approximately 2.91 nautical miles (NM) north of the Shelby Community Airport (12G). It would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 177 feet - a height that exceeds 250 feet above ground level within 2.91 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### AERONAUTICAL STUDY FOR POSSIBLE INSTRUMENT FLIGHT RULES (IFR) EFFECT DISCLOSED THE FOLLOWING:

- > The proposed structure would have no effect on any existing or proposed IFR arrival/departure routes, operations, or procedures.
- > The proposed structure would have no effect on any existing or proposed IFR en route routes, operations, or procedures.
- > The proposed structure would have no effect on any existing or proposed IFR minimum flight altitudes.

### AERONAUTICAL STUDY FOR POSSIBLE VISUAL FLIGHT RULES (VFR) EFFECT DISCLOSED THE FOLLOWING:

- > The proposed structure would have no effect on any existing or proposed VFR arrival or departure routes, operations or procedures.
- > The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any known public use or military airports.
- > The proposed structure would not penetrate those altitudes normally considered available to airmen for VFR en route flight.
- > The proposed structure will be appropriately obstruction marked and lighted to make it more conspicuous to airmen flying in VFR weather conditions at night.

The cumulative impact of the proposed structure, when combined with other existing structures is not considered 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.

Sectional Map for ASN 2011-WTE-2226-OE





Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Group  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2227-OE

Issued Date: 07/27/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 43
Location:	Shelby, OH
Latitude:	40-55-02.43N NAD 83
Longitude:	82-41-50.02W
Heights:	427 feet above ground level (AGL) 1497 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 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 01/27/2013 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within



6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 August 26, 2011. 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 in triplicate to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, Airspace Regulations & ATC Procedures Group, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 05, 2011 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2227-OE.

**Signature Control No: 137676671-146784324**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2227-OE**

Proposal: To construct a(n) Wind Turbine to a height of 427 feet above ground level, 1497 feet above mean sea level.

Location: The structure will be located 2.67 nautical miles north of 12G Airport reference point.

Part 77 Obstruction Standard(s) Exceeded:

Section 77.17 (a) (2) by 177 feet - a height that exceeds 1320 feet above mean sea level within 2.67 nautical miles of U\_12G.

Section 77.17 (a) (3) by 5 feet - a height that increases a minimum instrument flight altitude within a terminal area (TERPS Criteria). The proposal would necessitate increasing the 12G Obstacle Penetrates Diverse A Departure Area by 5 feet, Requiring TAKE-OFF MINIMUM AND (OBSTACLE) DEPARTURE PROCEDURES, RWY 36, 400-3 (Ceiling-Visibility) or Standard with a Minimum Climb Gradient of 205 feet per NM until reaching 1600.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were circularized to the aeronautical public for comment. There were two letters of objection received during the comment period. These letters can be summarized as objecting to the structure because it would exceed obstruction standards at Shelby Community Airport (12G).

Part 77 Obstruction Standards are used to screen the many proposals submitted in order to identify those which warrant further aeronautical study in order to determine if they would have significant adverse effect on protected aeronautical operations. While the obstruction standards trigger formal aeronautical study, including circularization, they do not constitute absolute or arbitrary criteria for identification of hazards to air navigation. Accordingly, the fact that a proposed structure exceeds an obstruction standard of Part 77 does not provide a basis for a determination that the structure would constitute a hazard to air navigation.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

Sectional Map for ASN 2011-WTE-2227-OE





Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Group  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2228-OE

Issued Date: 07/27/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 44
Location:	Shelby, OH
Latitude:	40-54-55.49N NAD 83
Longitude:	82-42-07.77W
Heights:	427 feet above ground level (AGL) 1499 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 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 01/27/2013 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within

6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 August 26, 2011. 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 in triplicate to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, Airspace Regulations & ATC Procedures Group, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on September 05, 2011 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2228-OE.

**Signature Control No: 137676673-146784419**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)



## **Additional information for ASN 2011-WTE-2228-OE**

Proposal: To construct a(n) Wind Turbine to a height of 427 feet above ground level, 1499 feet above mean sea level.

Location: The structure will be located 2.56 nautical miles north of 12G Airport reference point.

Part 77 Obstruction Standard(s) Exceeded:

Section 77.17 (a) (2) by 179 feet - a height that exceeds 1320 feet above mean sea level within 2.56 nautical miles of U\_12G.

Section 77.17 (a) (3) by 25 feet - a height that increases a minimum instrument flight altitude within a terminal area (TERPS Criteria). The proposal would necessitate increasing the 12G Obstacle Penetrates Diverse A Departure Area by 25 feet, Requiring TAKE-OFF MINIMUM AND (OBSTACLE) DEPARTURE PROCEDURES, RWY 36, 400-3 (Ceiling-Visibility) or Standard with a Minimum Climb Gradient of 215 feet per NM until reaching 1600.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were circularized to the aeronautical public for comment. There were two letters of objection received during the comment period. These letters can be summarized as objecting to the structure because it would exceed obstruction standards at Shelby Community Airport (12G).

Part 77 Obstruction Standards are used to screen the many proposals submitted in order to identify those which warrant further aeronautical study in order to determine if they would have significant adverse effect on protected aeronautical operations. While the obstruction standards trigger formal aeronautical study, including circularization, they do not constitute absolute or arbitrary criteria for identification of hazards to air navigation. Accordingly, the fact that a proposed structure exceeds an obstruction standard of Part 77 does not provide a basis for a determination that the structure would constitute a hazard to air navigation.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

A black and white photograph of a map of the Cleveland, Ohio area. A white rectangular box is drawn over the map, containing the text "MANSFIELD 108.8 CH 25 MFD". The map shows various locations including Mansfield, Cleveland, Shelby, and Grestline, along with numerous radio frequency callouts and station identifiers.



Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2229-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 45
Location:	Shelby, OH
Latitude:	40-53-54.37N NAD 83
Longitude:	82-45-20.06W
Heights:	492 feet above ground level (AGL) 1592 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2229-OE.

**Signature Control No: 137676675-139596529**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2229-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1592 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.06 nautical miles (NM) northwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 267 feet - a height that exceeds 225 feet above ground level within 3.06 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

**Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2600 feet AMSL.**

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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







Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2230-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 46
Location:	Shelby, OH
Latitude:	40-53-26.33N NAD 83
Longitude:	82-46-01.88W
Heights:	492 feet above ground level (AGL) 1597 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2230-OE.

**Signature Control No: 137676677-139596848**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2230-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1597 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.35 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 243 feet - a height that exceeds 249 feet above ground level within 3.35 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

Section 77.17(a)(4)

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2600 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

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Sectional Map for ASN 2011-WTE-2230-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2231-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 47
Location:	Shelby, OH
Latitude:	40-53-23.33N NAD 83
Longitude:	82-45-30.86W
Heights:	492 feet above ground level (AGL) 1630 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.



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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2231-OE.

**Signature Control No: 137676679-139610254**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2231-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1630 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 2.96 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 292 feet - a height that exceeds 200 feet above ground level within 2.96 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

Sectional Map for ASN 2011-WTE-2231-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2232-OE

Issued Date: 03/29/2011

Scott Zeimet  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 48
Location:	Shelby, OH
Latitude:	40-52-58.74N NAD 83
Longitude:	82-45-59.09W
Heights:	492 feet above ground level (AGL) 1617 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2232-OE.

**Signature Control No: 137676681-139610601**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)



## **Additional information for ASN 2011-WTE-2232-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1617 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.20 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 273 feet - a height that exceeds 219 feet above ground level within 3.20 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

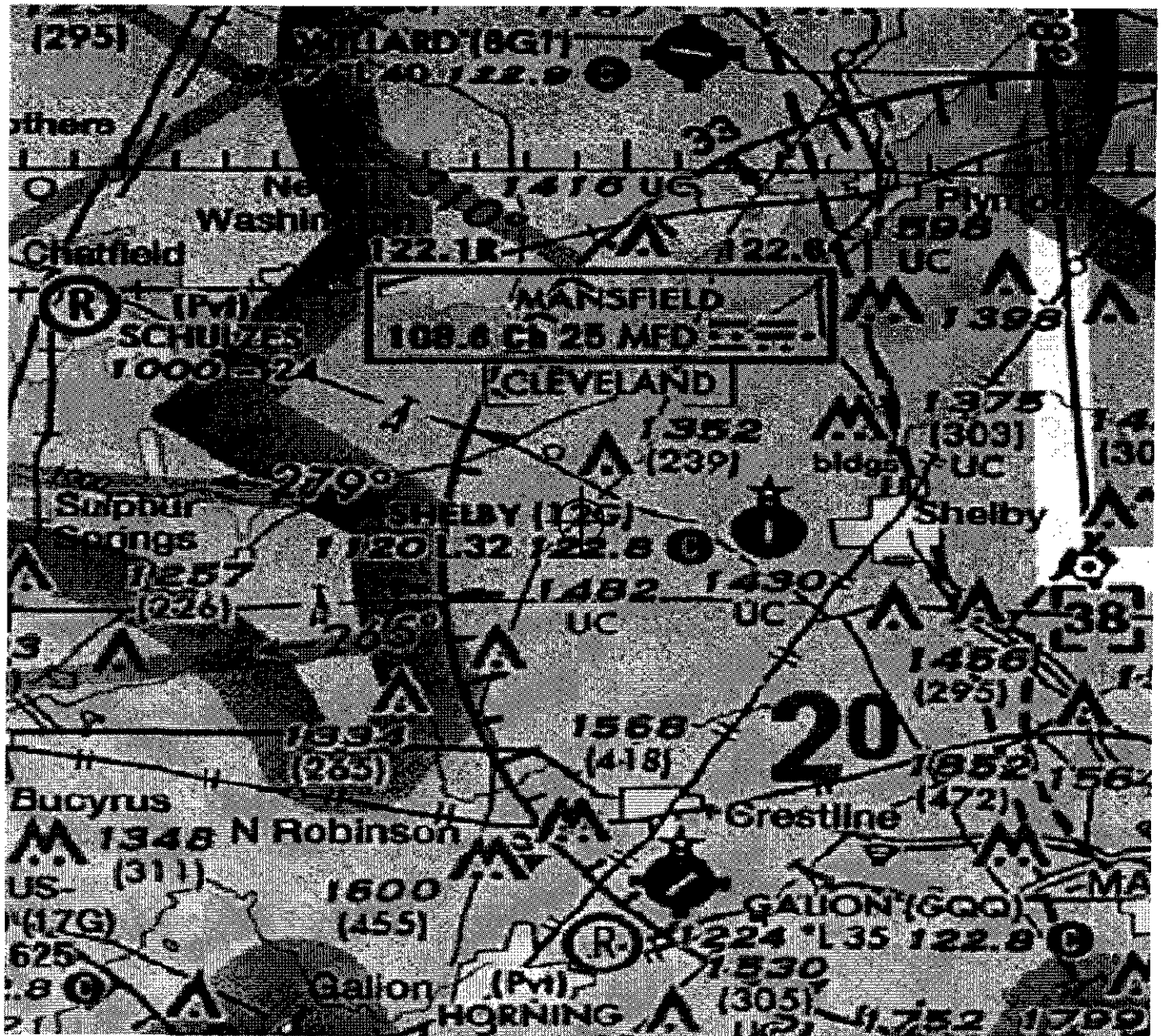
The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

Sectional Map for ASN 2011-WTE-2232-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2233-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 49
Location:	Shelby, OH
Latitude:	40-52-52.56N NAD 83
Longitude:	82-45-23.94W
Heights:	492 feet above ground level (AGL) 1616 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2233-OE.

**Signature Control No: 137676683-139611091**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2233-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1616 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 2.74 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 292 feet - a height that exceeds 200 feet above ground level within 2.74 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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



Sectional Map for ASN 2011-WTE-2233-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2234-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 50
Location:	Shelby, OH
Latitude:	40-52-39.36N NAD 83
Longitude:	82-45-20.38W
Heights:	492 feet above ground level (AGL) 1600 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint only - Chapters 12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2234-OE.

**Signature Control No: 137676685-139597006**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2234-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1600 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 2.67 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 280 feet - a height that exceeds 212 feet above ground level within 2.67 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

**Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2600 feet AMSL.**

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

## Sectional Map for ASN 2011-WTE-2234-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2235-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 51
Location:	Shelby, OH
Latitude:	40-52-25.66N NAD 83
Longitude:	82-45-20.96W
Heights:	492 feet above ground level (AGL) 1612 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.



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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2235-OE.

**Signature Control No: 137676687-139611250**  
Sheri Edgett-Baron  
Manager, Obstruction Evaluation Group

( DNH -WT )

Attachment(s)  
Additional Information  
Map(s)

## **Additional information for ASN 2011-WTE-2235-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1612 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 2.66 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 292 feet - a height that exceeds 200 feet above ground level within 2.66 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

Section 77.17(a)(4)

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

## Sectional Map for ASN 2011-WTE-2235-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2236-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 52
Location:	Shelby, OH
Latitude:	40-52-25.58N NAD 83
Longitude:	82-45-53.90W
Heights:	492 feet above ground level (AGL) 1608 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2236-OE.

**Signature Control No: 137676689-139611461**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)



## **Additional information for ASN 2011-WTE-2236-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1608 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.08 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 281 feet - a height that exceeds 211 feet above ground level within 3.08 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

**Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.**

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

Sectional Map for ASN 2011-WTE-2236-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2237-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 53
Location:	Shelby, OH
Latitude:	40-51-30.46N NAD 83
Longitude:	82-46-20.88W
Heights:	492 feet above ground level (AGL) 1615 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2237-OE.

**Signature Control No: 137676691-139611695**  
Sheri Edgett-Baron  
Manager, Obstruction Evaluation Group

( DNH -WT )

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2011-WTE-2237-OE**

Proposal: To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1615 feet above mean sea level (AMSL).

Location: This proposal would be located approximately 3.53 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 240 feet - a height that exceeds 252 feet above ground level within 3.53 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

Section 77.17(a)(4)

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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



## Sectional Map for ASN 2011-WTE-2237-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2238-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 54
Location:	Shelby, OH
Latitude:	40-51-24.40N NAD 83
Longitude:	82-46-05.59W
Heights:	492 feet above ground level (AGL) 1602 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint only - Chapters 12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2238-OE.

**Signature Control No: 137676693-139615974**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2238-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1602 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.37 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 246 feet - a height that exceeds 246 feet above ground level within 3.37 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

**Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.**

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2239-OE

Issued Date: 03/29/2011

Scott Zeimet  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 55
Location:	Shelby, OH
Latitude:	40-51-36.87N NAD 83
Longitude:	82-45-47.99W
Heights:	492 feet above ground level (AGL) 1622 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint only - Chapters 12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.



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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2239-OE.

**Signature Control No: 137676695-139616096**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2239-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1622 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.10 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 283 feet - a height that exceeds 209 feet above ground level within 3.10 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

Sectional Map for ASN 2011-WTE-2239-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2240-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 56
Location:	Shelby, OH
Latitude:	40-51-24.75N NAD 83
Longitude:	82-45-38.74W
Heights:	492 feet above ground level (AGL) 1616 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2240-OE.

**Signature Control No: 137676697-139618108**  
Sheri Edgett-Baron  
Manager, Obstruction Evaluation Group

( DNH -WT )

Attachment(s)  
Additional Information  
Map(s)



## **Additional information for ASN 2011-WTE-2240-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1616 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.04 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 289 feet - a height that exceeds 203 feet above ground level within 3.04 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

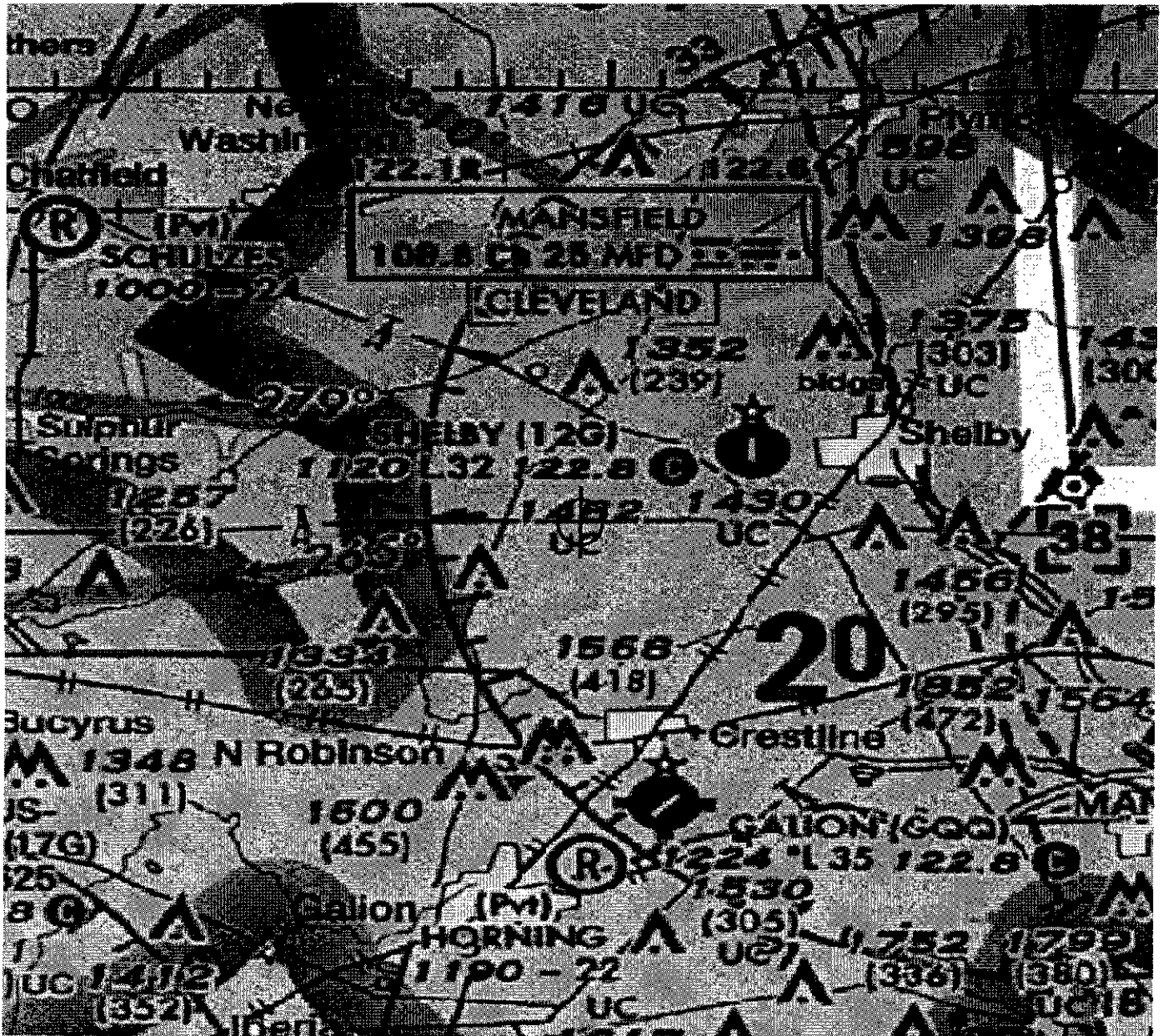
The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2241-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 57
Location:	Shelby, OH
Latitude:	40-52-43.29N NAD 83
Longitude:	82-44-28.40W
Heights:	492 feet above ground level (AGL) 1609 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2241-OE.

**Signature Control No: 137676699-139618323**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2241-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1609 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 2.03 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 289 feet - a height that exceeds 203 feet above ground level within 2.03 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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



[illegible]



Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2242-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 58
Location:	Shelby, OH
Latitude:	40-52-02.12N NAD 83
Longitude:	82-44-31.64W
Heights:	492 feet above ground level (AGL) 1622 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2242-OE.

**Signature Control No: 137676701-139611978**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2242-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1622 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 2.06 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 292 feet - a height that exceeds 200 feet above ground level within 2.06 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

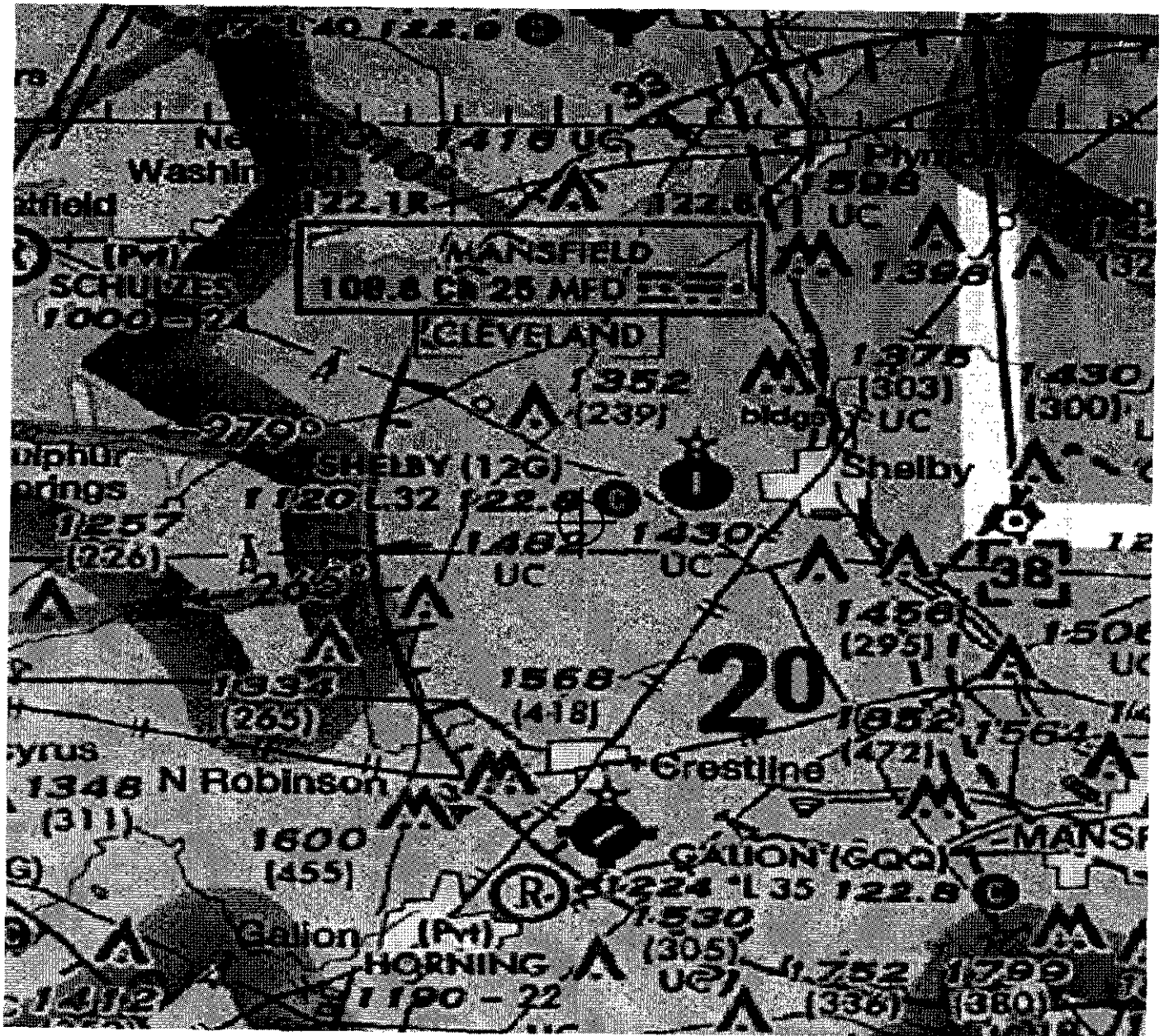
The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

Sectional Map for ASN 2011-WTE-2242-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2243-OE

Issued Date: 03/29/2011

Scott Zeimet  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 59
Location:	Shelby, OH
Latitude:	40-51-35.72N NAD 83
Longitude:	82-45-06.09W
Heights:	492 feet above ground level (AGL) 1606 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.



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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2243-OE.

**Signature Control No: 137676703-139613243**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2243-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1606 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 2.59 nautical miles (NM) west of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 286 feet - a height that exceeds 206 feet above ground level within 2.59 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

**Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.**

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2244-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 60
Location:	Shelby, OH
Latitude:	40-51-06.98N NAD 83
Longitude:	82-45-51.17W
Heights:	492 feet above ground level (AGL) 1620 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blauch, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2244-OE.

**Signature Control No: 137676705-139613614**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

*Attachment(s)*

Additional Information

Map(s)



## **Additional information for ASN 2011-WTE-2244-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1620 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.29 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 263 feet - a height that exceeds 229 feet above ground level within 3.29 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

Section 77.17(a)(4)

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2245-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 61
Location:	Shelby, OH
Latitude:	40-50-46.21N NAD 83
Longitude:	82-45-05.69W
Heights:	427 feet above ground level (AGL) 1555 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2245-OE.

**Signature Control No: 137676707-139597194**  
Sheri Edgett-Baron  
Manager, Obstruction Evaluation Group

( DNH -WT )

Attachment(s)  
Additional Information  
Map(s)

## **Additional information for ASN 2011-WTE-2245-OE**

**Proposal:** To construct a Wind Turbine to a height of 427 feet above ground level (AGL), 1555 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 2.94 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 227 feet - a height that exceeds 200 feet above ground level within 2.94 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

**Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2600 feet AMSL.**

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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



Sectional Map for ASN 2011-WTE-2245-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2246-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 62
Location:	Shelby, OH
Latitude:	40-50-38.59N NAD 83
Longitude:	82-45-31.07W
Heights:	492 feet above ground level (AGL) 1621 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint only - Chapters 12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2246-OE.

**Signature Control No: 137676709-139619819**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2246-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1621 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.28 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 265 feet - a height that exceeds 227 feet above ground level within 3.28 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

[illegible]



Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2247-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 63
Location:	Shelby, OH
Latitude:	40-50-48.30N NAD 83
Longitude:	82-46-27.44W
Heights:	492 feet above ground level (AGL) 1621 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.



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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2247-OE.

**Signature Control No: 137676711-139619976**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2247-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1621 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.84 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 209 feet - a height that exceeds 283 feet above ground level within 3.84 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

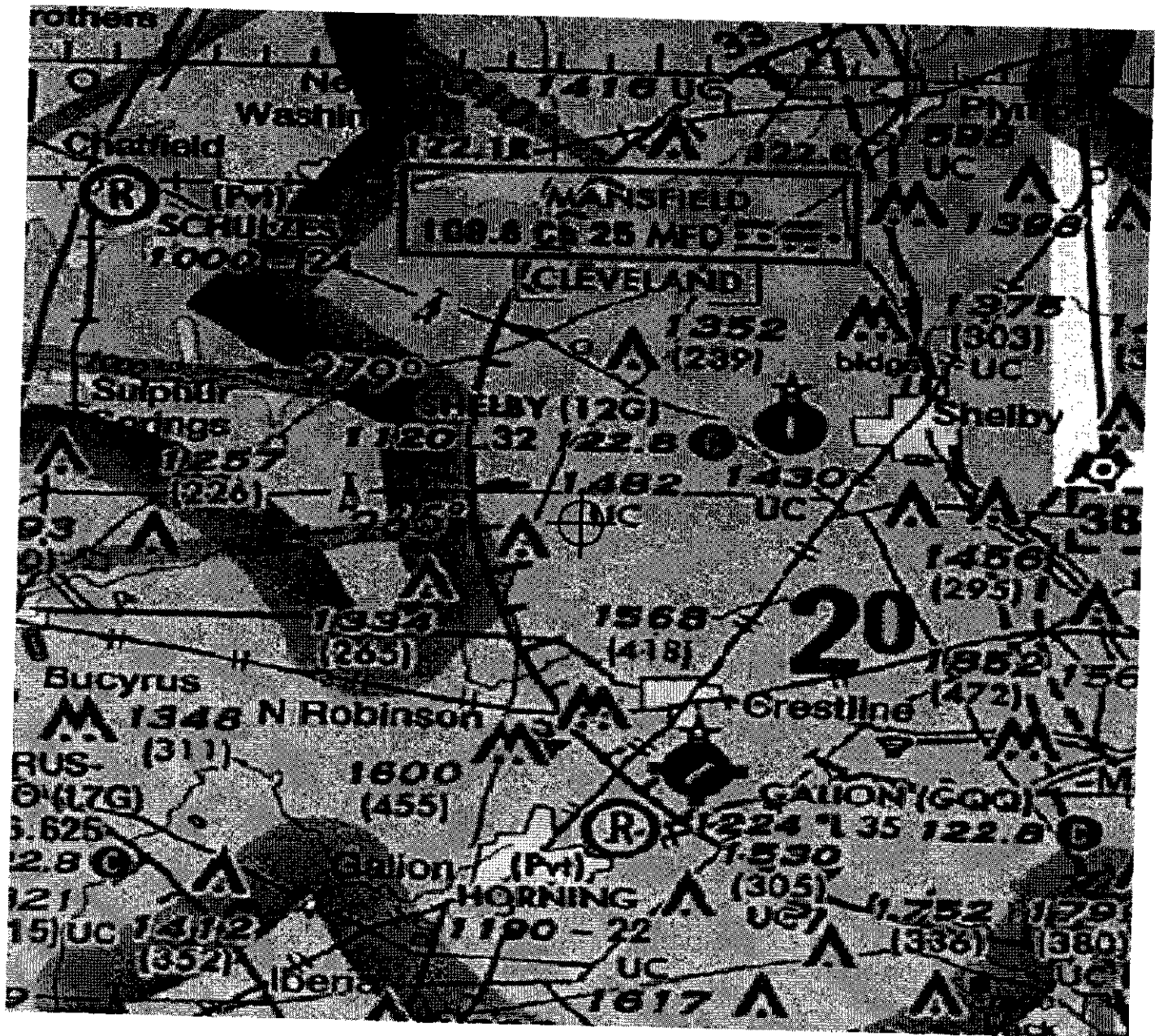
The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2248-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 64
Location:	Shelby, OH
Latitude:	40-50-29.79N NAD 83
Longitude:	82-46-05.94W
Heights:	492 feet above ground level (AGL) 1622 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2248-OE.

**Signature Control No: 137676713-139621002**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)



## **Additional information for ASN 2011-WTE-2248-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1622 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 3.73 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 219 feet - a height that exceeds 273 feet above ground level within 3.73 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

**Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.**

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2249-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 65
Location:	Shelby, OH
Latitude:	40-50-24.12N NAD 83
Longitude:	82-46-33.24W
Heights:	492 feet above ground level (AGL) 1617 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2249-OE.

**Signature Control No: 137676715-139622592**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

**Additional information for ASN 2011-WTE-2249-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1617 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 4.08 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 184 feet - a height that exceeds 308 feet above ground level within 4.08 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

**Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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



Sectional Map for ASN 2011-WTE-2249-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2250-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 66
Location:	Shelby, OH
Latitude:	40-50-17.99N NAD 83
Longitude:	82-47-41.00W
Heights:	492 feet above ground level (AGL) 1603 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint only - Chapters 12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2250-OE.

**Signature Control No: 137676717-139623089**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2250-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1603 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 4.89 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 94 feet - a height that exceeds 398 feet above ground level within 4.89 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

### **Section 77.17(a)(4)**

**Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.**

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

Sectional Map for ASN 2011-WTE-2250-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2251-OE

Issued Date: 03/29/2011

Scott Zeimet  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 67
Location:	Shelby, OH
Latitude:	40-50-29.54N NAD 83
Longitude:	82-47-46.31W
Heights:	492 feet above ground level (AGL) 1598 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.



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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2251-OE.

**Signature Control No: 137676719-139597443**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2251-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1598 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 4.87 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 91 feet - a height that exceeds 401 feet above ground level within 4.87 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

Section 77.17(a)(4)

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2600 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2252-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 68
Location:	Shelby, OH
Latitude:	40-49-56.16N NAD 83
Longitude:	82-46-43.77W
Heights:	492 feet above ground level (AGL) 1619 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2252-OE.

**Signature Control No: 137676721-139623531**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)



**Additional information for ASN 2011-WTE-2252-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1619 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 4.44 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 149 feet - a height that exceeds 343 feet above ground level within 4.44 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

**Section 77.17(a)(4)**

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

This is a detailed topographic map of the Mansfield, Ohio area. The map shows various towns and locations, including Mansfield, Cleveland, Shelby, Gallon, and others. It includes numerous elevation markers, road numbers, and other geographical features. The map is oriented with North at the top.

Key locations and features visible on the map include:

- Towns and Locations:** Mansfield, Cleveland, Shelby, Gallon, Horning, Iberia, Bucyrus, Grestline, and others.
- Elevation Markers:** Numerous points with elevations such as 122.1, 122.8, 1352, 1430, 1456, 1568, 1600, 1617, 1699, 1720, 1739, 1752, 1779, 1792, 1800, 1817, 1832, 1852, 1869, 1882, 1892, 1900, 1910, 1920, 1932, 1948, 1952, 1962, 1972, 1982, 1992, 2000, 2010, 2020, 2030, 2040, 2050, 2060, 2070, 2080, 2090, 2100, 2110, 2120, 2130, 2140, 2150, 2160, 2170, 2180, 2190, 2200, 2210, 2220, 2230, 2240, 2250, 2260, 2270, 2280, 2290, 2300, 2310, 2320, 2330, 2340, 2350, 2360, 2370, 2380, 2390, 2400, 2410, 2420, 2430, 2440, 2450, 2460, 2470, 2480, 2490, 2500, 2510, 2520, 2530, 2540, 2550, 2560, 2570, 2580, 2590, 2600, 2610, 2620, 2630, 2640, 2650, 2660, 2670, 2680, 2690, 2700, 2710, 2720, 2730, 2740, 2750, 2760, 2770, 2780, 2790, 2800, 2810, 2820, 2830, 2840, 2850, 2860, 2870, 2880, 2890, 2900, 2910, 2920, 2930, 2940, 2950, 2960, 2970, 2980, 2990, 3000, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3080, 3090, 3100, 3110, 3120, 3130, 3140, 3150, 3160, 3170, 3180, 3190, 3200, 3210, 3220, 3230, 3240, 3250, 3260, 3270, 3280, 3290, 3300, 3310, 3320, 3330, 3340, 3350, 3360, 3370, 3380, 3390, 3400, 3410, 3420, 3430, 3440, 3450, 3460, 3470, 3480, 3490, 3500, 3510, 3520, 3530, 3540, 3550, 3560, 3570, 3580, 3590, 3600, 3610, 3620, 3630, 3640, 3650, 3660, 3670, 3680, 3690, 3700, 3710, 3720, 3730, 3740, 3750, 3760, 3770, 3780, 3790, 3800, 3810, 3820, 3830, 3840, 3850, 3860, 3870, 3880, 3890, 3900, 3910, 3920, 3930, 3940, 3950, 3960, 3970, 3980, 3990, 4000, 4010, 4020, 4030, 4040, 4050, 4060, 4070, 4080, 4090, 4100, 4110, 4120, 4130, 4140, 4150, 4160, 4170, 4180, 4190, 4200, 4210, 4220, 4230, 4240, 4250, 4260, 4270, 4280, 4290, 4300, 4310, 4320, 4330, 4340, 4350, 4360, 4370, 4380, 4390, 4400, 4410, 4420, 4430, 4440, 4450, 4460, 4470, 4480, 4490, 4500, 4510, 4520, 4530, 4540, 4550, 4560, 4570, 4580, 4590, 4600, 4610, 4620, 4630, 4640, 4650, 4660, 4670, 4680, 4690, 4700, 4710, 4720, 4730, 4740, 4750, 4760, 4770, 4780, 4790, 4800, 4810, 4820, 4830, 4840, 4850, 4860, 4870, 4880, 4890, 4900, 4910, 4920, 4930, 4940, 4950, 4960, 4970, 4980, 4990, 5000, 5010, 5020, 5030, 5040, 5050, 5060, 5070, 5080, 5090, 5100, 5110, 5120, 5130, 5140, 5150, 5160, 5170, 5180, 5190, 5200, 5210, 5220, 5230, 5240, 5250, 5260, 5270, 5280, 5290, 5300, 5310, 5320, 5330, 5340, 5350, 5360, 5370, 5380, 5390, 5400, 5410, 5420, 5430, 5440, 5450, 5460, 5470, 5480, 5490, 5500, 5510, 5520, 5530, 5540, 5550, 5560, 5570, 5580, 5590, 5600, 5610, 5620, 5630, 5640, 5650, 5660, 5670, 5680, 5690, 5700, 5710, 5720, 5730, 5740, 5750, 5760, 5770, 5780, 5790, 5800, 5810, 5820, 5830, 5840, 5850, 5860, 5870, 5880, 5890, 5900, 5910, 5920, 5930, 5940, 5950, 5960, 5970, 5980, 5990, 6000, 6010, 6020, 6030, 6040, 6050, 6060, 6070, 6080, 6090, 6100, 6110, 6120, 6130, 6140, 6150, 6160, 6170, 6180, 6190, 6200, 6210, 6220, 6230, 6240, 6250, 6260, 6270, 6280, 6290, 6300, 6310, 6320, 6330, 6340, 6350, 6360, 6370, 6380, 6390, 6400, 6410, 6420, 6430, 6440, 6450, 6460, 6470, 6480, 6490, 6500, 6510, 6520, 6530, 6540, 6550, 6560, 6570, 6580, 6590, 6600, 6610, 6620, 6630, 6640, 6650, 6660, 6670, 6680, 6690, 6700, 6710, 6720, 6730, 6740, 6750, 6760, 6770, 6780, 6790, 6800, 6810, 6820, 6830, 6840, 6850, 6860, 6870, 6880, 6890, 6900, 6910, 6920, 6930, 6940, 6950, 6960, 6970, 6980, 6990, 7000, 7010, 7020, 7030, 7040, 7050, 7060, 7070, 7080, 7090, 7100, 7110, 7120, 7130, 7140, 7150, 7160, 7170, 7180, 7190, 7200, 7210, 7220, 7230, 7240, 7250, 7260, 7270, 7280, 7290, 7300, 7310, 7320, 7330, 7340, 7350, 7360, 7370, 7380, 7390, 7400, 7410, 7420, 7430, 7440, 7450, 7460, 7470, 7480, 7490, 7500, 7510, 7520, 7530, 7540, 7550, 7560, 7570, 7580, 7590, 7600, 7610, 7620, 7630, 7640, 7650, 7660, 7670, 7680, 7690, 7700, 7710, 7720, 7730, 7740, 7750, 7760, 7770, 7780, 7790, 7800, 7810, 7820, 7830, 7840, 7850, 7860, 7870, 7880, 7890, 7900, 7910, 7920, 7930, 7940, 7950, 7960, 7970, 7980, 7990, 8000, 8010, 8020, 8030, 8040, 8050, 8060, 8070, 8080, 8090, 8100, 8110, 8120, 8130, 8140, 8150, 8160, 8170, 8180



Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2253-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 69
Location:	Shelby, OH
Latitude:	40-49-30.45N NAD 83
Longitude:	82-46-34.93W
Heights:	492 feet above ground level (AGL) 1622 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint only - Chapters 12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2253-OE.

**Signature Control No: 137676723-139626448**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

**Additional information for ASN 2011-WTE-2253-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1622 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 4.60 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point and approximately 4.92 NM northwest of the Galion Municipal Airport (GQQ) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 133 feet - a height that exceeds 359 feet above ground level within 4.60 NM as applied to 12G.

Section 77.17(a)(2) by 6 feet - a height that exceeds 486 feet above ground level within 4.92 NM as applied to GQQ.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

Section 77.17(a)(4)

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during

the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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



A black and white map of the Cleveland, Ohio area, showing various radio stations and their frequencies. A large, dark, irregular shape is superimposed on the map, covering parts of the city and surrounding areas. The map includes labels for cities like Cleveland, Shaker Square, and Cuyahoga Falls, and various radio stations with their call letters and frequencies. A large number '20' is visible in the lower right quadrant.



Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2254-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 70
Location:	Shelby, OH
Latitude:	40-49-24.51N NAD 83
Longitude:	82-47-04.86W
Heights:	492 feet above ground level (AGL) 1622 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blaich, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2254-OE.

**Signature Control No: 137676725-139624389**

(DNH -WT)

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## **Additional information for ASN 2011-WTE-2254-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1622 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 4.96 nautical miles (NM) southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 97 feet - a height that exceeds 395 feet above ground level within 4.96 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

Section 77.17(a)(4)

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2255-OE

Issued Date: 03/29/2011

Scott Zeimet  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 71
Location:	Shelby, OH
Latitude:	40-48-54.98N NAD 83
Longitude:	82-46-49.65W
Heights:	492 feet above ground level (AGL) 1615 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.



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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blach, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2255-OE.

**Signature Control No: 137676727-139635472**

(DNH -WT)

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

**Additional information for ASN 2011-WTE-2255-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1615 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 4.52 nautical miles (NM) northwest of the Galion Municipal Airport (GQQ) reference point and approximately 5.12 NM southwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 39 feet - a height that exceeds 453 feet above ground level within 4.52 NM as applied to GQQ.

Section 77.17(a)(2) by 80 feet - a height that exceeds 412 feet above ground level within 5.12 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

Section 77.17(a)(4)

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during

the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

Sectional Map for ASN 2011-WTE-2255-OE





Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2011-WTE-2256-OE

Issued Date: 03/29/2011

Scott Zeimetz  
Element Power  
222 South Ninth Street  
Suite 2870  
Minneapolis, MN 55417

**\*\* 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 BF 72
Location:	Shelby, OH
Latitude:	40-48-56.80N NAD 83
Longitude:	82-47-45.48W
Heights:	492 feet above ground level (AGL) 1613 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 and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, 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 completed and returned to this office any time the project is abandoned or:

- ☒ At least 42 days prior to start of construction (7460-2, Part I)  
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

This determination expires on 09/29/2012 unless:

- extended, revised or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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 April 28, 2011. 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 in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on May 08, 2011 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 Office of Airspace and Rules 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.

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 Michael Blauch, at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2256-OE.

**Signature Control No: 137676729-139618653**

( DNH -WT )

Sheri Edgett-Baron

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)



## **Additional information for ASN 2011-WTE-2256-OE**

**Proposal:** To construct a Wind Turbine to a height of 492 feet above ground level (AGL), 1613 feet above mean sea level (AMSL).

**Location:** This proposal would be located approximately 4.98 nautical miles (NM) northwest of the Shelby Community Airport (12G) reference point.

The proposal would exceed the Obstruction Standards of Title 14, Code of Federal Regulations (14 CFR), Part 77 as follows:

Section 77.17(a)(2) by 28 feet - a height that exceeds 464 feet above ground level within 4.98 NM as applied to 12G.

The proposal was not circularized for public comment because current FAA obstruction evaluation policy exempts from circularization those proposals that exceed the above cited obstruction standard. This is provided the proposal does not lie within an airport traffic pattern. This policy does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

Section 77.17(a)(4)

Proposal Increases the Minimum Obstruction Clearance Altitude (MOCA) on Victor Airway V-416-542 from Mansfield VORTAC (MFD), 265 Radial, to JUVDU Intersection from 2500 feet AMSL to 2700 feet AMSL.

MOCAS assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 nautical miles of the associated VOR navigational facility. For that portion of the route segment beyond 22 nautical miles from the VOR, a structure that affects only the MOCA would not be considered to have substantial adverse effect.

Notify FAA within six weeks of start of construction to update aeronautical charts by submitting Supplemental Notice (FAA Form 7460-2), Part 1.

An aeronautical study for Visual Flight Rules (VFR) disclosed that the proposed structure would not affect VFR navigation. The proposed structure would have to exceed 500 feet Above Ground Level (AGL) to penetrate the vertical confines of any VFR route.

Details of the proposed structure were not circularized to the aeronautical public for comment.

The proposed structures' proximity to the airport was considered and found to be acceptable.

The proposed structure was found to have no substantial adverse effect on the VFR traffic patterns in the vicinity of the site.

The impact on arrival, departure, and en route procedures for aircraft operating under VFR/IFR conditions at existing and planned public use and military airports, as well as aeronautical facilities, was considered during the analysis of the structure. The aeronautical study disclosed that the proposed structure would have no substantial adverse effect upon any terminal or en route instrument procedure or altitude.

The cumulative impact (IFR/VFR) resulting for the structure, when combined with the impact of other existing or proposed structures was considered and found to be acceptable.

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

