

Judicial Review of the Aviation Hazard Determinations for Cape Wind: Why The FAA Got It Wrong

Michael DeLoreto¹

Abstract: Cape Wind, located off the coast of Barnstable, Massachusetts, is a bellwether offshore wind power generation site in the United States. The Court of Appeals for the D.C. Circuit vacated and remanded a Federal Aviation Administration (FAA) "no hazard" determination related to Cape Wind on the grounds it was issued arbitrarily and capriciously. Upon remand, the FAA provided additional rationale for its decision and re-issued a "no-hazard" determination. This Article argues the latest determination fails to meet the standards outlined by the D.C. Circuit.

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"Though human ingenuity may make various inventions ... it will never devise any inventions more beautiful, nor more simple, nor more to the point than Nature does." – Leonardo Da Vinci²

I. Introduction

This Article examines the decision of the Court of Appeals for the District of Columbia (D.C. Circuit) in *Town of Barnstable v. FAA*,³ which stalled development of a major offshore wind farm project in the

¹ J.D. Candidate, 2014, Seton Hall University School of Law; M.P.A., University of Pennsylvania.; B.A., Drew University. Thank you to my wife and family for their ongoing support and my faculty advisor, Professor Marc Poirier, for his guidance during the writing process. I hope this comment adds to the growing legal scholarship on wind energy.

² XIV NOTEBOOKS OF LEONARDO DA VINCI 837 (Jean Paul Richter ed., 1880).

³ 659 F.3d 28 (D.C. Cir. 2011).

United States. Harnessing the wind to power human activity is not a new idea,⁴ but Americans have continued in our tradition of ingenuity to capture the power of nature with greater efficiency and far more developed technology.⁵ Over 51,000 megawatts of power are generated from wind in the United States today, and our nation accounts for 20% of the global generation of wind energy.⁶ This share of global wind power is expected to grow as the United States embarks on an ambitious plan to provide 10 gigawatts of offshore wind generating capacity by the year 2020 and 54 gigawatts by 2030.⁷

One of the first offshore wind projects in the United States was slated to be Cape Wind, located off the coast of Massachusetts in Nantucket Sound.⁸ (Image 1). Cape Wind is expected to have 130 turbines located between five and thirteen miles from the Massachusetts shoreline.⁹ When complete, this project could generate 174 megawatts of energy on average, with a maximum generating capacity of 486 megawatts.¹⁰ Cape Wind advocates claim that this wind farm will be able to provide 75% of all the power needed for Cape Cod, Martha's Vineyard, and Nantucket.¹¹

⁴ The first known wind mills were constructed by Persians in early 500 A.D. Phyllis Mckenzie, *World History of Windmills*, http://www.utexas.edu/gtc/assets/pdfs/windmills_world.pdf (last visited Sept. 15, 2012). The first known wind mill that would spin in whatever direction the wind would blow and could automatically slow itself down was invented in the United States in 1854 by Daniel Halladay of Connecticut. *Id.*

⁵ See generally DENNIS G. SHEPPARD, HISTORICAL DEVELOPMENT OF THE WINDMILL, NASA CONTRACTOR REPORT 4337 (1990), available at <http://wind.nrel.gov/public/library/shepherd.pdf>.

⁶ *Industry Statistics*, AM. WIND ENERGY ASS'N, http://www.awea.org/learnabout/industry_stats/index.cfm (last visited July 17, 2013). To put this power generation in perspective, one megawatt of wind energy is enough to power at least 240 homes. *FAQ*, TRADE WIND ENERGY, http://www.tradewindenergy.com/windlibrary_sub.aspx?id=136 (last visited July 17, 2013).

⁷ Press Release, Dep't of the Interior, Salazar, Chu Announce Major Offshore Wind Initiatives (Feb. 7, 2011), available at <http://www.doi.gov/news/pressreleases/Salazar-Chu-Announce-Major-Offshore-Wind-Initiatives.cfm>. This initiative would produce enough power for 2.8 million homes by 2020 and 15.2 million homes by 2030. *Id.*

⁸ *Project at a Glance*, CAPE WIND, <http://www.capewind.org/modules.php?op=modload&name=Sections&file=index&req=viewarticle&artid=24&page=1> (last visited July 17, 2013). This project was the first to be given a license by the Department of the Interior, but there are other projects including a wind project off the coast of Atlantic City, N.J. which may be completed before Cape Wind due to the ongoing litigation which is the focus of this Article. See generally Press Release, Fishermen's Energy, Fishermen's Energy Receives Final Construction Permit (July 19, 2012) <http://www.fishermensenergy.com/press-releases/Press-Release%20Fishermen%27s-USACOE-Permits.pdf>.

⁹ *Frequently Asked Questions – Cape Wind Basics*, CAPE WIND, <http://www.capewind.org/FAQ-Category4-Cape+Wind+Basics-Parento-myfaq-yes.htm> (last visited July 17, 2013).

¹⁰ *Id.*

¹¹ *Id.* The entire area of Cape Cod, Martha's Vineyard, and Nantucket uses 230 megawatts of energy annually. Press Release, Cape Wind, Independent Experts Agree, Cape Wind Electricity will Power Cape & Islands and Reduce Pollution and Energy Prices (June 3, 2003), <http://www.capewind.org/modules.php?op=modload&name=News&file=article&sid=81&mode=thread&order=0&thold=0>.

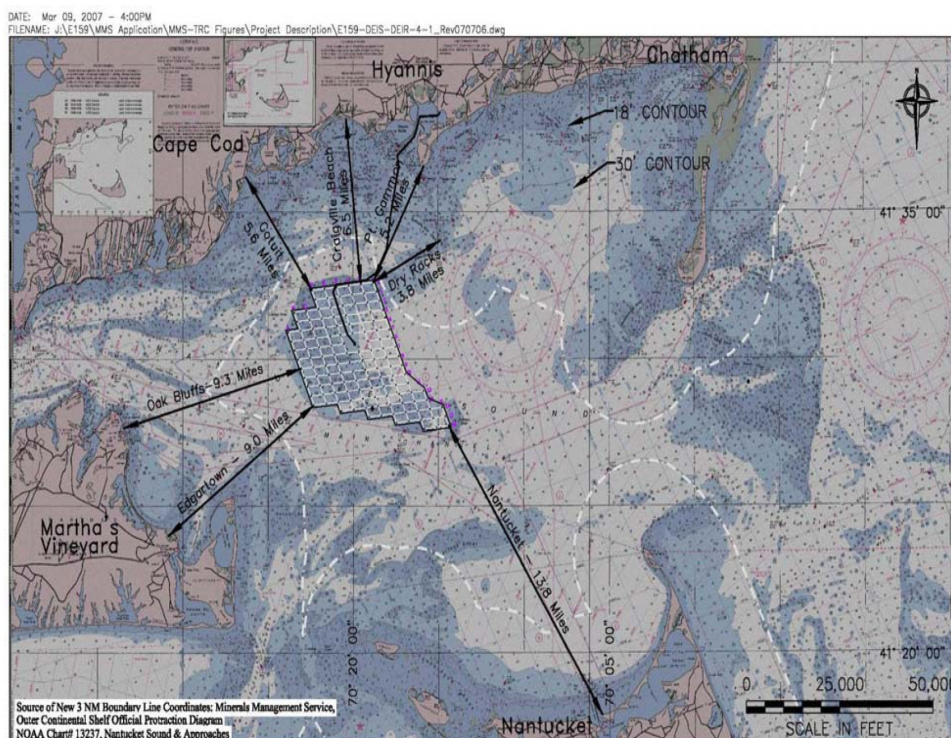


Image 1. Cape Wind Project Site Map. Courtesy of the U.S. Department of Interior.

Despite the push for green technology and the issuance of approvals from various federal agencies including the Department of Interior (DOI) and Federal Aviation Administration (FAA), Cape Wind has met strong resistance from the surrounding local towns, the homeowners in those communities, and even Robert F. Kennedy, Jr., the son of Robert F. Kennedy and a Senior Attorney for the Natural Resources Defense Council (NRDC).¹² This resistance has led to extensive litigation. In January 2011, the Town of Barnstable, Massachusetts, and the non-profit group, The Alliance to Protect Nantucket Sound, filed a lawsuit challenging the FAA's determination that the Cape Wind project would not pose a hazard to aviation. The petitioners argued that the FAA's "no hazard" determination regarding the wind turbines was arbitrary and capricious.¹³ They claimed the FAA "misread its own regulations, and ... failed to calculate the dangers posed to local aviation."¹⁴ Although the FAA opposed the relief sought, the D.C. Circuit vacated the FAA's decision and remanded the determination back to the FAA for

¹² Robert F. Kennedy, Jr., Op-Ed., *An Ill Wind Off Cape Cod*, N.Y. TIMES, Dec. 16, 2005, http://www.nytimes.com/2005/12/16/opinion/16kenedy.html?_r=0 (last visited Sept. 23, 2013); Press Release, Dep't of the Interior, Secretary Salazar Announces Approval of Cape Wind Energy Project on Outer Continental Shelf of Massachusetts (Apr. 28, 2010), available at <http://www.doi.gov/news/doinews/Secretary-Salazar-Announces-Approval-of-Cape-Wind-Energy-Project-on-Outer-Continental-Shelf-off-Massachusetts.cfm>; FEDERAL AVIATION ADMIN., DETERMINATION OF NO HAZARD TO AIR NAVIGATION, FEDERAL AVIATION ADMIN. STUDY NO. 2009-WTE-332-OE (2010), available at <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=displayOECASE&oeCaseID=157246996> [hereinafter STUDY NO. 2009-WTE-332-OE]. Further, the NRDC is a supporter of the project. See *infra* discussion and sources cited accompanying note 80.

¹³ *Town of Barnstable*, 659 F.3d at 31.

¹⁴ *Id.*

reconsideration.¹⁵ The FAA conducted a new inquiry, taking the court's opinion into account, ultimately reaching the same conclusion and releasing a second determination that Cape Wind was not a hazard to air travel.¹⁶

This Article will argue the D.C. Circuit was justified in finding the FAA's first determination to be arbitrary and capricious, and that based upon the initial ruling, the FAA has not corrected the flaws in its second determination. In support of this thesis, Part II provides an overview of the approval process for Cape Wind and explains the required FAA determination. Part III explores the FAA's initial No Hazard Determination findings regarding Cape Wind. Then, Part IV summarizes the arguments made by the parties in the *Barnstable* case and addresses the D.C. Circuit's holding. Part V discusses why the FAA's second Determination issued following the court's remand is still deficient under the *Barnstable* holding. Part VI proposes potential solutions to avoid future challenges to FAA No Hazard Determinations, including a revision to the FAA's own regulations.

II. Permitting Cape Wind and the Need for FAA Determinations

A. Federal Permitting Authorities

As the first proposed offshore wind project in the United States, Cape Wind entered uncharted statutory and regulatory territory from its inception. At the time, federal law was silent with respect to permitting authority for offshore wind and energy projects. Onshore, wind energy projects are licensed by the DOI pursuant to the Federal Land Policy and Management Act.¹⁷ Cape Wind sought its first permit in 2001 from the U.S. Army Corps of Engineers ("Corps"), which had assumed authority under the Rivers and Harbors Act of 1899 (RHA) to grant permits for offshore wind energy projects.¹⁸

The Corps had no explicit statutory authority to grant permits for offshore wind power, only the broad authority granted by the RHA to permit obstructions to navigable waters of the United States.¹⁹ In 1953, with the passage of the Outer Continental Shelf Land Act (OCSLA),²⁰ Congress expanded the geographic scope of the Corps' permitting authority to the Outer Continental Shelf.²¹ This statutory discrepancy between licensing onshore and offshore wind projects did not go unnoticed and was addressed by the Energy Policy Act of 2005, which expressly granted the DOI—working in cooperation with other federal agencies—the authority to grant leases on the Outer Continental Shelf for certain

¹⁵ *Id.* at 36.

¹⁶ STUDY NO. 2012-WTE-322-OE, *supra* note 12.

¹⁷ 43 U.S.C. § 1701; ADAM VANN, CONG. RESEARCH SERV., WIND ENERGY: OFFSHORE PERMITTING 3 (2007).

¹⁸ 33 U.S.C. § 1. See generally Ann Yarling, *Increasing Offshore Wind Projects: A Focus on Regulatory Authority*, NAT'L. L. REV. (Mar. 8, 2012), available at <http://www.natlawreview.com/article/increasing-offshore-wind-projects-focus-regulatory-authority> (discussing early regulation of offshore wind turbines).

¹⁹ 33 U.S.C. §§ 401-426p.

²⁰ 43 U.S.C. §§ 1331-1356a.

²¹ *Id.* See generally VANN, *supra* note 17. The Outer Continental Shelf extends from the U.S. coastline and outward for 200 nautical miles. *Id.* at 1.

activities including wind energy production.²² By 2006, the Cape Wind project was under the authority of the DOI.

Although the DOI took over as the lead permitting agency for the Cape Wind project per the Energy Policy Act of 2005, the DOI had to work in consultation with other federal agencies. One such agency was the Federal Aviation Administration (FAA). The FAA has a statutory responsibility to study any object or structure that may interfere with air commerce, if it is believed the object will result in an obstruction to air travel.²³ Congress enumerated five specific factors when considering a structure's impact on air travel:

- The impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules ("VFR");²⁴
- Impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules ("IFR");²⁵
- The impact on existing public-use airports and aeronautical facilities;
- The impact on planned public-use airports and aeronautical facilities; and
- The cumulative impact resulting from the proposed construction or alteration of a structure when combined with the impact of other existing or proposed structures.²⁶

Under this Congressional mandate, the FAA promulgated rules as to when a project triggers a review for interference with air commerce.²⁷ These regulations state that when a structure's height exceeds 200 feet, the FAA must be notified by the proponent of the structure.²⁸ In the case of Cape Wind, each wind turbine tower will be 258 feet tall, with the maximum height of each wind turbine blade being 440 feet.²⁹ Because of the height of each turbine, Cape Wind was required to notify the FAA of the project and thus the FAA embarked on a review of whether the turbines created a hazard to air traffic.

²² 43 U.S.C. § 1337(p)(1); VANN, *supra* note 17, at 4. Part of the reason for Congressional action on the issue was the first lawsuit filed against Cape Wind, which claimed the Corps of Engineers did not have the statutory authority to license the Cape Wind project. See *Alliance to Protect Nantucket Sound v. U.S. Dep't of the Army*, 288 F. Supp. 2d 64 (D. Mass. 2003), *aff'd*, 398 F.3d 105 (1st Cir. 2005) (holding Corps of Engineers did have authority to issue permits).

²³ 49 U.S.C. § 44718. The statute specifically authorizes the Secretary of the Department of Transportation (DOT) to conduct the study, and DOT has delegated this authority to the FAA. While not a focus of this Article, it is important to note that subdelegation, a subsequent delegation of authority to an agency within a department, is permitted under 5 U.S.C. § 302.

²⁴ VFR Rules allow the pilot to be able to operate the aircraft based upon his visual reference with the ground and surroundings. See *Redhead v. United States*, 686 F.2d 178, 180 at n.1 (3d Cir. 1982).

²⁵ IFR Rules are in effect when the pilot cannot operate the aircraft based on visual references due to weather or darkness and must rely solely on instruments to navigate. *Id.*

²⁶ 49 U.S.C. §§ 44718(b)(1)(A)–(E).

²⁷ Safe, Efficient Use, and Preservation of the Navigable Airspace, 14 C.F.R. § 77.

²⁸ Construction or alteration requiring notice, 14 C.F.R. § 77.9.

²⁹ *Frequently Asked Questions: Cape Wind Basics*, CAPE WIND, <http://www.capewind.org/FAQ-Category4-Cape+Wind+Basics-Parento-myfaq-yes.htm> (last visited Sept. 23, 2013).

B. The FAA Determination Process

To determine if a structure like the Cape Wind turbines will obstruct or interfere with air travel, the FAA regulations require the study of certain factors.³⁰ These factors focus on the object's impact to:

- Aircraft operating under VFR;
- Aircraft operating under IFR;
- Existing and planned public-use airports;
- Airport traffic capacity;
- Obstacle clearance altitudes, approach procedures, and departure procedures;
- Impacts to radar facilities, communications, and other surveillance systems; and
- The cumulative impact of the proposed structure when combined with all other effects.³¹

To provide further internal guidance in studying a potential obstruction, the FAA issued Order JO 7400.2G ("the Handbook"), which creates uniform procedures used in the administration of airspace management.³² The Handbook states that because the navigable airspace is a limited national resource:

full consideration shall be given to all airspace users, to include national defense; commercial and general aviation; and space operations. Accordingly, *while a sincere effort shall be made to negotiate equitable solutions to conflicts over the use of the airspace for non-aviation purposes, preservation of the navigable airspace for aviation shall be the primary emphasis.*³³

Part Two of the Handbook supplements the statutory and regulatory framework Congress and the FAA have established for addressing structures interfering with airspace.³⁴ When conflicts in airspace use arise, the FAA emphasizes the need to protect airspace for air navigation and to protect air navigation facilities from either "electromagnetic or physical encroachments."³⁵ Should a proposed project and airspace use conflict, the Handbook again states that first priority should be given to altering the project to eliminate the conflict.³⁶

Part Two of the Handbook also contains details on how the FAA is to evaluate whether a substantial adverse aeronautical impact exists.³⁷ It notes that a structure has an adverse effect when it exceeds one

³⁰ 14 C.F.R. §§ 77.13 through 77.35.

³¹ Evaluating aeronautical effect, 14 C.F.R. § 77.29(a)(1)–(7).

³² FED. AVIATION ADMIN., PROCEDURES OF HANDLING AIRSPACE MATTERS, ORDER JO 7400.2G (Apr. 10, 2008) *available at* <http://www.faa.gov/documentLibrary/media/Order/7400.2G.pdf> [hereafter ORDER JO 7400.2G].

³³ *Id.* at 1-2-1 (emphasis added).

³⁴ *Id.* at 5-1-1 ("The guidelines, procedures, and criteria detailed in this part supplement those contained in part 77, Objects Affecting Navigable Airspace...."); *id.* at 5-1-2 ("The FAA's authority to promote the safe and efficient use of the navigable airspace, whether concerning existing or proposed structures, is predominantly derived from Title 49 U.S.C. Section 44718....").

³⁵ *Id.* at 6-3-1(a).

³⁶ *Id.* at 6-3-1(b).

³⁷ *Id.* at 6-1-1 through 6-3-37.

of the previously enumerated standards in the regulation or has a physical or electromagnetic impact on air navigation facilities.³⁸ The Handbook specifies that a structure could cause a substantial adverse impact through a combination of effects, such as impacting both flight courses and a significant volume of activity.³⁹ The Handbook states that the “significant volume” threshold is met if more than one flight a day would be impacted since “this would indicate a regular and continuing activity.”⁴⁰

Based upon the findings of this study, the FAA makes a determination as to whether the obstruction will be a hazard to air navigation.⁴¹ This determination lists the effects on air traffic departure and arrival; air traffic procedures; minimum flight altitudes; and impacts on air navigation facilities, communications, and surveillance systems which collectively lead to the determination’s outcome.⁴² When the FAA believes the object will cause an adverse aeronautical impact, it issues a “Determination of Hazard to Air Navigation.”⁴³

If the FAA concludes, however, “that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation,” the FAA will issue a “Determination of No Hazard.”⁴⁴ Although a Determination of No Hazard might be issued, it does not necessarily mean the project does not require improvements. In fact, the Determination of No Hazard may include conditional provisions that must be implemented in order for the project to move forward, such as marking or lighting requirements to make the objects conspicuous to air traffic.⁴⁵

Interested individuals can challenge the FAA’s determination through an FAA internal appeals process, referred to as a “Petition for Discretionary Review.”⁴⁶ In addition to triggering an additional review by the FAA, the Petition enables individuals who were not given a prior opportunity to comment on the project to put forth substantive aeronautical comments related to the proposal, such as alleged impacts on air travel and radar systems.⁴⁷ To be granted, the Petition must include “new information or facts not previously considered or presented during the aeronautical study, including valid aeronautical reasons why the determination ... made by the FAA should be reviewed.”⁴⁸

III. The FAA’s Initial Determination of No Hazard for Cape Wind

Under the framework of 49 U.S.C. § 44718, 14 C.F.R. § 77, and the Handbook, the FAA conducted an aeronautical study on the Cape Wind project.⁴⁹ The study:

³⁸ *Id.* at 6-3-3.

³⁹ *Id.* at 6-3-5.

⁴⁰ *Id.* at 6-3-4.

⁴¹ Determinations, 14 C.F.R. § 77.31.

⁴² *Id.* § 77.31(b)(1)–(2).

⁴³ *Id.* § 77.31(c).

⁴⁴ *Id.* § 77.31(d)–(e).

⁴⁵ *Id.* § 77.31(d)(1)–(4).

⁴⁶ Petitions for Discretionary Review, 14 C.F.R. §§ 77.37 through 77.41.

⁴⁷ *Id.* § 77.37(a).

⁴⁸ *Id.* § 77.39(b).

⁴⁹ STUDY NO. 2009-WTE-332-OE, *supra* note 12, at 2.

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.⁵⁰

As part of the study process, the FAA circulated the Cape Wind proposal on February 13, 2009 to "all known aviation interests and to non-aeronautical interests that may be affected by the proposal."⁵¹ It allowed one year for interested persons to review the study and comment, with the comment period extended from an original deadline of March 22, 2009 to April 30, 2010.⁵² Fourteen letters of objection were filed with the FAA, and their comments along with FAA responses made up the greater half of the FAA's Determination regarding Cape Wind.⁵³ Some of the comments filed with the FAA were outside the scope of the aeronautical study, such as concerns about the environmental noise impacts of the wind farm on the mainland and concerns that the type of wind turbine used was improper.⁵⁴ There were, however, two areas of concern that did fall under the FAA purview: the impact on flights operating under VFR and the impact on air traffic control radar.⁵⁵

A. VFR Flight Concerns

Public comments against Cape Wind first focused on the adverse impacts to VFR navigation.⁵⁶ Many commenters expressed concern that a considerable number of VFR operations would be impacted because many pilots would move from lower altitudes of 500 to 1,000 feet to altitudes of 1,000 feet or higher in order to avoid the turbines, causing aircraft to fly too close to one another.⁵⁷ Additionally, Nantucket Sound is subject to poor weather; forcing pilots to fly at higher altitudes might create navigation issues for VFR pilots who may need to stay at certain altitudes to maintain visual observation.⁵⁸ The FAA did not agree with the commenters' concerns and stated that the "proposed wind turbines [did] not exceed any 14 C.F.R. Part 77 obstruction standards."⁵⁹ The FAA did note however that "some aircraft operating under visual flight rules (VFR) *may have to alter their altitude or route of flight.*"⁶⁰ The FAA further noted that the Cape Wind project is within two statute miles of a

⁵⁰ *Id.* (emphasis added).

⁵¹ *Id.* at 4.

⁵² *Id.*

⁵³ *Id.*

⁵⁴ *Id.* at 4–5.

⁵⁵ *Id.* at 5.

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.* (alteration from original). 14 C.F.R. § 77 requires a height of 499 feet or higher to be an obstruction.

⁶⁰ STUDY NO. 2009-WTE-332-OE, *supra* note 12, at 7 (emphasis added).

regularly used VFR route.⁶¹ The FAA however determined that the project would not adversely impact VFR operations because Section 6-3-8(c)(1) of the Handbook states that the structure has to be above 500 feet tall *and* within two statute miles of a VFR route.⁶² In the Determination, the FAA did not address Section 6-3-3(b), which states that a structure has an adverse impact when it requires “a VFR operation, to change its regular flight course or altitude.”⁶³ The FAA went on to note that the windmill structures would be marked and/or lighted to make them “conspicuous to airmen should circumnavigation be necessary.”⁶⁴

B. Impact on Radar Facilities

Most commenters also took issue with the impacts of the proposed project on the three radar facilities which provide for the detection of aircraft in the Nantucket Sound area.⁶⁵ The FAA agreed with the commenters that Cape Wind could cause “unwanted search radar targets,” known as “clutter,” to appear on an air traffic controller’s radar screens, which can confuse air traffic controllers.⁶⁶ The FAA found the impact on the Otis Air Force Base (“FMH”) radar to be particularly significant because that Base uses a type of analog search radar system which has “limited capabilities to resolve the effects of clutter caused by multiple wind turbines within a confined area.”⁶⁷ The cumulative effect of the wind turbines’ rotation on the FMH radar system would likely be expected to reduce search radar detection for aircraft at all altitudes above the wind farm.⁶⁸ To address this problem, the FAA determined that upgrades to the radar systems would be necessary, and Cape Wind agreed to pay \$15 million into an escrow account for the FAA to make the modifications or install a new radar system should the upgrades not work.⁶⁹ With this agreement in place, the FAA concluded “there [would] not be a significant adverse effect to radar services in Nantucket Sound.”⁷⁰

⁶¹ *Id.* A statute mile is the standard mile of 5,280 feet. This is compared to a nautical mile, which is roughly 1.15 statute miles. NAT’L GEOSPATIAL-INTELLIGENCE AGENCY, CONVERSION TABLE FOR NAUTICAL MILES AND STATUTE MILES, (2012), available at http://msi.nga.mil/MSISiteContent/StaticFiles/NAV_PUBS/DBP/endtables.pdf.

⁶² STUDY NO. 2009-WTE-332-OE, *supra* note 12, at 7.

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.* at 5. The three radar facilities are North Truro Cape (QEA), Nantucket (ACK), and Otis Air Force Base (FMH). *Id.*

⁶⁶ *Id.* The FAA reached this conclusion after conducting its own study as well as reviewing the studies provided by certain commenters. As a technical matter, radar works by sending out a signal which then hits an object and is returned to the radar station showing an object on the radar screen. Clutter is the term used to describe returns caused by surface objects (ground and sea objects caused by nature), volume (commonly caused by weather), and point sources (windmills, tall buildings, and other objects not caused by nature). *See generally Radar Clutter*, RADAR TUTORIAL, <http://www.radartutorial.eu/11.coherent/coo4.en.html> (last visited Jan. 4, 2013).

⁶⁷ STUDY NO. 2009-WTE-332-OE, *supra* note 12, at 6. Although the FAA determination refers to Otis Air Force Base, the facility is actually an Air National Guard and Coast Guard facility located on Cape Cod and is home to the 102nd Intelligence Wing, a non-airborne military intelligence unit. 102ND INTELLIGENCE WING <http://www.102iw.ang.af.mil/> (last visited Nov. 5, 2012).

⁶⁸ STUDY NO. 2009-WTE-332-OE, *supra* note 12, at 6.

⁶⁹ *Id.*

⁷⁰ *Id.*

Taking all the cumulative impacts and public comments of the Cape Wind project into account, the FAA did not consider the project to have a substantial adverse effect and it issued a Determination of No Hazard on May 10, 2010.⁷¹

C. *Petition for Discretionary Review*

As previously noted, the FAA has an internal appeals mechanism to allow those in disagreement with the decision to petition for discretionary review. Various persons opposed to Cape Wind filed a Petition for Discretionary Review, which the FAA accepted as procedurally valid.⁷² The FAA, however, later rejected the request for discretionary review on the substantive basis that the wind turbines did not exceed 500 feet in height, thus there was no adverse effect on VFR operations.⁷³ The rejection also stated that because the FAA mitigated the impacts on radar system disruption by requiring radar facility upgrades, there was no cumulative impact significant enough to warrant a Hazard Determination.⁷⁴ In other words, the FAA rejected the Petition because there was no new substantial evidence to justify a further review of the project.

IV. *Town of Barnstable v. FAA and the D.C. Circuit Holding's Impact*

On January 19, 2011, the Town of Barnstable and the Alliance to Protect Nantucket Sound brought suit in the D.C. Circuit against the FAA challenging its "Determination of No Hazard" for the Cape Wind project.⁷⁵ The Town of Barnstable asserted that it was harmed by the FAA's determination because it is the operator of the Barnstable Municipal Airport ("HYA").⁷⁶ HYA is the third busiest airport in the State of Massachusetts, with 108,657 flights occurring in 2009.⁷⁷ The vast majority of those flights, 84,593, occurred under VFR; 24,064 occurred under IFR.⁷⁸ The Alliance to Protect Nantucket Sound (APNS) is a 501(c)(3) tax exempt organization "supported by thousands of private donors including aviators, concerned citizens, towns and local government and civic groups, trade associations, historic preservation interest and associations of fishing interest and boaters that oppose industrialization of Nantucket Sound and use the site of [Cape Wind] to pursue their interests."⁷⁹ The harm asserted by the

⁷¹ *Id.* at 7.

⁷² Joint Brief of Petitioners at 23, *Town of Barnstable v. Fed. Aviation Admin.*, 659 F.3d 28 (D.C. Cir. 2011) (No. 10-1276), ECF No. 1288795.

⁷³ Brief for Respondent at 12, *Town of Barnstable v. Fed. Aviation Admin.*, 659 F.3d 28 (D.C. Cir 2011) (No. 1-1276), ECF No. 1294074.

⁷⁴ *Id.*

⁷⁵ Joint Brief of Petitioners, *supra* note 72, at 1. Petitioners were allowed to bring this claim directly to the D.C. Circuit pursuant to 49 U.S.C. § 46110 (judicial review of FAA safety decisions).

⁷⁶ *Id.* at 22.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.* at 11.

town of Barnstable and the APNS in its pleadings was that their commercial, environmental, and recreational interest at and around the wind farm site would be detrimentally impacted.⁸⁰

A. *Standing of the Petitioners*

The first argument raised in the briefs of both parties was the issue of whether the Town and APNS had standing to bring the suit.⁸¹ The Town of Barnstable argued that it had standing to challenge the FAA determination because it would be harmed as the owner/operator of HYA.⁸² For an organization like APNS to have standing, however, it must show that its members would have standing, the interests at stake are relevant to the purpose of the organization, and neither the claim nor the relief sought requires individual participation.⁸³ APNS used an affidavit of its president, setting forth claims of harm to aviation and its members' economic livelihood and recreational activities, to establish standing as an organization.⁸⁴

The FAA disputed the standing of the petitioners, specifically APNS. To establish standing under Article III of the U.S. Constitution, a plaintiff must show the "threat of suffering injury in fact that is concrete and particularized; the threat must be actual and imminent, not conjectural or hypothetical; it must be fairly traceable to the challenged action of the defendant; and it must be likely that a favorable judicial decision will prevent or redress the injury."⁸⁵ The FAA asserted not only that there was no threat of immediate harm from Cape Wind, but also that the FAA had no ability to stop the building of the project—only the DOI did—and therefore, their injury is not traceable to the FAA determination.⁸⁶ In support of this premise, the FAA noted the decision to move forward with the project was made by the Department of the Interior on April 28, 2010, but that the FAA Determination of No Hazard was not

⁸⁰ *Id.* at 11–12. As an aside, the opposition is a prime example of NIMBY (Not In My Backyard). These NIMBY concerns are elaborated in the Robert F. Kennedy, Jr., op-ed, *supra* note 12, where he states the views from sixteen historical lighthouses will be damaged and he urges visitors to come see the historic wrecks off Cape Cod, the fishing villages, and try some of the amazing seafood the region offers. There is also a connection between APNS and a fossil fuel tycoon, William Koch, who has donated over \$1.5 million to APNS and sits on the APNS Board of Directors. *Bill Koch: The Dirty Money Behind Cape Wind Opposition*, GREENPEACE, <http://www.greenpeace.org/usa/en/campaigns/global-warming-and-energy/polluterwatch/Bill-Koch/> (last visited Apr. 20, 2013). While APNS claims to be concerned with the environmental impacts, major environmental special interest groups support the project, including the Sierra Club, Greenpeace, Clean Water Action, League of Conservation Voters, Natural Resources Defense Council, and the National Wildlife Federation. *Support for Cape Wind*, CAPE WIND, <http://www.capewind.org/article47.htm> (last visited July 17, 2013).

⁸¹ See generally Joint Brief of Petitioners, *supra* note 72, at 5–7, 26; Brief for Respondent, *supra* note 73, at 17. Although not the focus of this Article, a brief discussion on standing is necessary in order to better understand the parties' position and the court's holding.

⁸² Joint Brief of Petitioners, *supra* note 72, at 26.

⁸³ See *Friends of Earth, Inc. v. Laidlaw Envtl. Servs. Inc.*, 528 U.S. 167, 181 (2000).

⁸⁴ *Id.* See also Joint Addendum of Statutes and Regulations of Petitioners at 89–90, *Town of Barnstable v. Fed. Aviation Admin.*, 659 F.3d 28 (D.C. Cir. 2011) (No.10-1276), ECF No. 1288796.

⁸⁵ Brief for Respondent, *supra* note 73, at 17 (quoting *Summers v. Earth Island Institute*, 555 U.S. 488, 493 (2009)).

⁸⁶ *Id.* at 18 (citing *BFI Waste Sys. of N. Am., Inc. v. FAA*, 293 F.3d 527, 530 (D.C. Cir. 2002)).

released until May 10, 2010.⁸⁷ Therefore, the FAA claimed it had no control over the final issuance of permits for Cape Wind and could not be the cause of any harm.⁸⁸

B. FAA's Failure to Follow Its Own Guidance

APNS and the Town of Barnstable further argued that the FAA violated its "statutory duties and its own regulations" because the FAA's sole focus in its Determination of No Hazard was whether the wind turbines met the technical definition of obstruction, without properly taking into account the interference with air navigation.⁸⁹ Petitioners stated that Congress charged the FAA with the statutory authority to determine whether a structure has an impact on air travel depending upon the factors listed in 49 U.S.C. § 44718(b). Under this authority, the FAA promulgated the regulations found in 14 C.F.R. § 77 and issued the Handbook to provide internal guidance on how to determine when a structure is an obstruction, either by size or by creating a substantially adverse aeronautical effect.⁹⁰ The Town of Barnstable and APNS asserted that the FAA's Determination of No Hazard was arbitrary and capricious because the decision did not comport with what the Handbook prescribed.⁹¹ In other words, the FAA failed to follow its own guidance.

The Handbook instructs that the goal of the FAA is the protection of airspace and that altering the proposal should be the first priority in the case of conflicts.⁹² The Handbook goes on to state that an adverse effect exists when there is an obstruction standard violation under 14 C.F.R. § 77 and/or an impact on air navigation facilities.⁹³ Petitioners claimed this existed here because there was an impact on radar facilities. In addition, because the FAA found that there would have to be changes to certain aircraft operating under VFR, petitioners asserted this meant there was an adverse impact under Section 6-3-3(b). Moreover, since the FAA found that some VFR aircraft would be impacted, this could cause a significant cumulative impact under Section 6-3-5.⁹⁴ Lastly, petitioners pointed to a provision in the Handbook which states that if there is evidence of a structure being a hazard, the FAA has *no discretion* to find otherwise.⁹⁵

The FAA disputed the petitioners' view and claimed it met its statutory and regulatory obligations. First, the FAA stated that the statutory and regulatory authority merely tells the FAA when to conduct an aeronautical study and what should be taken into account as a part of that study.⁹⁶ The FAA claimed it did exactly that, and where the statute fell silent it filled in the gaps with the regulations and the

⁸⁷ *Id.* at 21.

⁸⁸ *Id.*

⁸⁹ Joint Brief of Petitioners, *supra* note 72, at 16.

⁹⁰ *Id.* at 18–19.

⁹¹ *Id.* at 19–20.

⁹² Order 7400.2G, *supra* note 32, at 1-2-1. Joint Brief of Petitioners, *supra* note 72, at 18.

⁹³ Order 7400.2G, *supra* note 32, at 6-3-3.

⁹⁴ Joint Brief of Petitioners, *supra* note 72, at 40.

⁹⁵ Order 7400.2G, *supra* note 32, at 7-1-3(c) (emphasis added).

⁹⁶ Brief for Respondent, *supra* note 73, at 5.

Handbook.⁹⁷ Therefore, the FAA claimed that the court should defer to the agency's expertise in the matter.⁹⁸

Second, the FAA claimed that it followed prior court precedent and that its decision in Cape Wind was generally consistent with prior determinations it had made.⁹⁹ The FAA noted that an agency's interpretations of its own regulations are controlling unless plainly erroneous or inconsistent with the regulation.¹⁰⁰ Because the FAA claimed it took into account and answered all the comments and issues raised during the public comment period, the FAA asserted it had met its obligations to adequately explain its results and respond to relevant and significant public comments.¹⁰¹

C. D.C. Circuit Opinion

On October 28, 2011, the D.C. Circuit decided *Barnstable*, holding that the petitioners had standing and that the FAA determination was arbitrary and capricious.¹⁰² Even though the court agreed that the FAA determination has no "enforceable legal effect" and cannot prevent the building of Cape Wind, it found that the DOI gave the FAA a significant role in the decision-making process when it mandated that construction could not begin until the receipt of the FAA determination and compliance with any mitigation measures.¹⁰³ The DOI's reliance on the FAA satisfied the standing test's requirement of redressability because it would be "improbable" that the FAA's determination would be "blithely disregarded."¹⁰⁴

On the substantive matter of the Determination of No Hazard, the court held the determination was indeed arbitrary and capricious because the FAA departed from its own Handbook.¹⁰⁵ The court based this reasoning on the varying definitions of "substantial adverse effect" which existed throughout the Handbook. For example, substantial adverse impact is defined in Section 6-3-3 of the Handbook as existing when there is an obstruction standard violation under the regulations or when there is an effect on the operations of the air traffic system.¹⁰⁶ In Section 6-3-4 of the Handbook, substantial impact exists when there is an adverse impact on a significant number of flight operations, and Section 6-3-5

⁹⁷ *Id.* at 14–15.

⁹⁸ *Id.* at 29–30; see also *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 843–44 (1984). *Chevron* deference is the concept that if a statute administered by an agency is ambiguous with respect to the specific issue, the courts will defer to the agency's reasonable interpretation of the statute. *Id.* The D.C. Circuit did not address the *Chevron* claim made by the FAA in its decision. This may have been because the statute being administered did clearly speak to the issue at hand, thus the FAA did not reach the first requirement for *Chevron* deference. *Barnstable* does not turn on a matter of statutory interpretation, but rather the application of an agency's own guidelines. This makes *Chevron* not applicable to this case and explains why it was not given consideration by the D.C. Circuit in its ruling.

⁹⁹ Brief for Respondent, *supra* note 73, at 46.

¹⁰⁰ *Auer v. Robbins*, 519 U.S. 452, 461 (1997).

¹⁰¹ *Public Citizen, Inc. v. FAA*, 988 F.2d 186, 197 (D.C. Cir. 1993) (citing *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 35 & n.58 (D.C. Cir. 1977)).

¹⁰² *Town of Barnstable*, 659 F.3d 28.

¹⁰³ *Id.* at 31–32.

¹⁰⁴ *Id.* at 34. In support of this, the court also cited *Bennett v. Spear*, 520 U.S. 154, 170 (1997), which granted standing despite the fact the decision maker was free to disregard the opinion in question.

¹⁰⁵ *Id.* at 34.

¹⁰⁶ *Id.* at 35.

states there could be a substantial adverse effect if there is a cumulative impact under Sections 6-3-3 and 6-3-4.¹⁰⁷ In the view of the FAA, all these prior definitions are seemingly irrelevant because Section 6-3-8(c)(1) states that there can be a substantial adverse impact on VFR routes when an object is over 500 feet tall and is within two miles of a VFR route.¹⁰⁸ Because the FAA solely relied on the definition of substantial adverse impact under Section 6-3-8(c)(1), without addressing the other potential triggers included in Sections 6-3-3, 6-3-4, and 6-3-5, the court held the FAA was “improperly relying ... on 6-3-8(c)(1),” and it “failed to supply any apparent analysis of the record evidence concerning the wind farm’s potentially adverse effects on VFR operations.”¹⁰⁹

D. *The Barnstable Court’s View on Agency Deference*

The D.C. Circuit’s ruling in *Barnstable* spoke to the amount of deference an agency can expect when interpreting its own rules. Agency regulations are promulgated under the authority of a statutory mandate and are generally reviewable for the procedural requirements of notice and comment and their substantive requirements.¹¹⁰ However, agency interpretations of their own rules, such as the FAA’s interpretation of “substantial adverse effect,” are generally given greater deference unless the interpretation is plainly erroneous or inconsistent with the regulation.¹¹¹ In the Administrative Procedure Act (APA), which sets forth the standard of judicial review governing federal agency decisions in the absence of explicit provisions of the enabling act, decisions can be set aside only if “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.”¹¹² Most court decisions note that this deference is not controlling, as it can be overcome by the judiciary when it strongly feels there is a lack of a rational connection between the facts and the policies enacted.¹¹³

Because *Barnstable* turns on the FAA’s interpretation of its Handbook and its own regulations in promulgating the hazard determinations, the court’s level of review should be deferential unless the FAA decision was erroneous. *Auer v. Robbins* is the leading case in this area.¹¹⁴ In *Auer*, police sergeants and a lieutenant in the St. Louis Police Department sued their employer under the Fair Labor Standards Act claiming they were owed overtime pay.¹¹⁵ The City of St. Louis argued that the officers were exempt from overtime pay as executive level personnel.¹¹⁶ The Department of Labor had previously

¹⁰⁷ *Id.* at 34.

¹⁰⁸ *Id.* at 35.

¹⁰⁹ *Id.*

¹¹⁰ CHARLES H. KOCH, ADMINISTRATIVE LAW & PRACTICE, § 10.23 (2012). Regulations, such as 14 C.F.R. § 77, are promulgated under the Administrative Procedure Act. 5 U.S.C. § 553.

¹¹¹ KOCH, *supra* note 110, at § 10.26. The concept of “plainly erroneous and inconsistent” stems from *Bowles v. Seminole Rock*, 325 U.S. 410, 413–14 (1945) where the court stated, “But the ultimate criterion is the interpretation, which becomes of controlling weight unless it is plainly erroneous or inconsistent with the regulation.” Although still good law, the plainly erroneous language of *Seminole Rock* has been replaced by the statutory language of the APA, which was enacted after *Seminole Rock*.

¹¹² 5 U.S.C. § 706(2)(A).

¹¹³ *Motor Vehicle Mfrs. Assn. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (citing *Burlington Truck Lines, Inc. v. U.S.*, 371 U.S. 156, 168 (1962)).

¹¹⁴ 519 U.S. 452 (1997).

¹¹⁵ *Id.*

¹¹⁶ *Id.*

issued regulations stating that the overtime exemption applied to employees paid a specified minimum amount on a salary basis, which required that the compensation “not [be] subject to reduction because of variations in the quality or quantity of the work performed.”¹¹⁷ Even though the St. Louis Police Manual stated that the officers’ pay could be reduced for disciplinary actions, the Department of Labor interpreted its own regulation excluding reductions in salary for reasons such as disciplinary measures.¹¹⁸ In a unanimous decision written by Justice Scalia, the U.S. Supreme Court upheld the Department of Labor’s interpretation of this “salary basis test” for overtime because the standard was created by the Department and therefore its interpretation should be left to the agency unless plainly erroneous or inconsistent with the regulations.¹¹⁹

This trend towards deference can be found in other cases where agency expertise is important. In *Marsh v. Oregon Natural Resources Council*, the Supreme Court held that when the analysis of the documents requires a high degree of technical expertise, courts should defer to the informed discretion of the responsible agency.¹²⁰ Judges, however, should not blindly defer to an agency without carefully reviewing the record to ensure the agency has made a reasoned decision based on the information.¹²¹

The D.C. Circuit has acknowledged in previous cases involving the FAA that courts should defer to agencies in interpreting their own regulations. In *Breneman v. FAA*,¹²² a structure being built on a hill would have extended 62 feet into the airport’s approach surface.¹²³ The FAA determined the structure to be a hazard based upon an earlier version of the Handbook and the D.C. Circuit upheld that determination because the evidence, in the court’s view, was sufficient to support the decision.¹²⁴

Based upon these cases, it may appear to some that the issuance of the Cape Wind Determination of No Hazard and the explanations contained within should be sufficient to survive judicial review. As in *Auer*, the FAA was using an interpretation of its Handbook to make a decision about whether Cape Wind was a hazard to air traffic. The FAA was also making a determination about air traffic with respect to Cape Wind that required some type of technical expertise, thereby allowing the court to defer to the informed discretion of the agency as was the case in *Marsh* and *Breneman*. However, the D.C. Circuit in *Barnstable* required a more detailed connection between the FAA’s determinations and *every* aspect of the agency’s own regulations that may impact the making of that determination. The court’s reliance on *D&F Afonso Realty v. Garvey* illustrates this point.¹²⁵

¹¹⁷ *Id.* (alterations to original).

¹¹⁸ *Id.*

¹¹⁹ *Id.* at 461.

¹²⁰ 490 U.S. 360, 377 (1989). This case addressed the issuance of permits by the Army Corps of Engineers and whether those permits could be issued based upon the available information or whether new information first needed to be considered by the Corps. The Court held in favor of the Corps, finding that the Corps’ decision not to issue a supplemental report based on the additional information was not arbitrary and capricious. *Id.* at 384-85.

¹²¹ *Id.*

¹²² 30 Fed. Appx. 7 (D.C. Cir. 2002).

¹²³ An approach surface is an imaginary slope line that extends upwards into the airspace from the runway in order to prevent objects from entering the path of aircraft. *Airport Approach Surface*, WILLIAMS AVIATION CONSULTANTS, <http://www.wacaz.com/services/obstruction-evaluation/airport-approach-surface/> (last visited July 17, 2013).

¹²⁴ *Breneman*, 30 Fed. Appx. at 8. The court also seemed to dislike the plaintiff who was purposely building up the hill in order to impede air traffic, thus violating the Court’s “chutzpah doctrine.” *Id.*

¹²⁵ *Town of Barnstable*, 659 F.3d at 36.

In *D&F*, a home was built near a small privately owned airport, thus requiring the FAA to be notified because of the proximity between the residence and the airport.¹²⁶ The FAA determined that the home intruded into the “transitional surface”¹²⁷ airspace around the airport by 16.1 feet.¹²⁸ The FAA then conducted an aeronautical study under 14 C.F.R. § 77 and determined that the house would cause a substantial adverse effect on the airport and inbound flights operating under VFR.¹²⁹ The Massachusetts Aeronautics Commission followed the FAA’s determination, which led the municipality where the home was located to refuse to issue an Occupant Certificate for the house.¹³⁰ The Hazard Determination was challenged in the D.C. Circuit, and the court held that the FAA’s Determination of Hazard was arbitrary, capricious, and not in accordance with the law.¹³¹ The court reached this conclusion by finding that the FAA did not properly follow its guidelines entitled “Procedures for Handling Airspace Matters.”¹³² Specifically, while the court did find that the height of the house unlawfully entered the airspace around the airport, there was no link between the hazard determination and the hazard standard.¹³³ The court noted there were other structures, like trees, which also impeded the airspace, yet the FAA failed to address these interferences.¹³⁴ The court succinctly stated, “even our highly deferential standard of review requires more than the FAA offers. Thus, the FAA’s abandonment of its own established procedures and its lack of reasoned analysis on the record constitute arbitrary and capricious agency action in violation of the law.”¹³⁵

D&F and *Breneman* seem like nearly analogous fact patterns. In each, there were violations of airspace requirements,¹³⁶ and in each the FAA found a violation and issued a Determination of Hazard. But in *Breneman* the FAA is upheld, while in *D&F* it was rejected. The way to reconcile these cases is to understand that the court’s decision turned on how it perceived the quality of the analysis by the FAA. By the court relying on *D&F* in its *Barnstable* decision, rather than applying *Breneman*, it is signaling to the FAA that the agency needed to set forth an explanation for every possible interference Cape Wind might cause and why those interferences would not matter. Even impacts that may seem trivial to the FAA require an explanation for the court to be satisfied.

V. The FAA Determination on Remand is Still Deficient under *Barnstable*

In response to the D.C. Circuit’s decision in *Barnstable*, the FAA conducted a new hazard determination for the Cape Wind project including a new study and new public comment period.¹³⁷ On

¹²⁶ *D&F Afonso Realty Trust v. Garvey*, 216 F.3d 1191, 1192 (D.C. Cir. 2000).

¹²⁷ This transitional surface extends up and out from the runway centerline and from the sides of the primary surface and the approach surface and is not to be entered into by an object. *Id.*

¹²⁸ *Id.* at 1193.

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.* at 1195.

¹³² *Id.* at 1195. The “Procedures for Handling Airspace Matters” is an older version of the Handbook.

¹³³ *Id.* at 1196.

¹³⁴ *Id.*

¹³⁵ *Id.* at 1196–97.

¹³⁶ The violation into airspace in *D&F* was 16.1 feet while the violation in *Breneman* was slightly larger at 62 feet.

¹³⁷ STUDY NO. 2012-WTE-322-OE, *supra* note 12.

August 15, 2012, the FAA issued a second Determination of No Hazard for the Cape Wind project.¹³⁸ This latest Determination attempts to address the issues expressed in *Barnstable* by providing a step-by-step analysis on how the FAA used its own guidelines to determine if a structure will have a substantial adverse impact.¹³⁹ The FAA stated in this new Determination that its first step was to determine if a violation of 14 C.F.R. § 77 exists.¹⁴⁰ If so, then it must proceed to the second step of evaluating whether there was an adverse effect.¹⁴¹ If an adverse effect is found, then the structure will be determined a hazard.¹⁴²

In its new Determination, the FAA explicitly clarified that there is no violation of 14 C.F.R. § 77 and therefore no hazard to air navigation.¹⁴³ The FAA made this decision because the project is below the 500-foot threshold required by the regulation, and because the FAA installed upgraded radar equipment to address the “clutter” problem. Therefore, the FAA claimed there is no need to analyze the project for any other adverse impacts.¹⁴⁴ The FAA also reasserted there is no reason to analyze the issue under Section 6-3-8(c)(1) of the Handbook because this only applies if the object is both 500 feet in height and within two miles of a VFR lane.¹⁴⁵ While Cape Wind is within two miles of a VFR lane, the wind farm does not exceed the height threshold of 500 feet.¹⁴⁶

Although the FAA provided a slightly improved explanation, the August 2012 Determination of No Hazard has already been challenged by the Town of Barnstable and APNS in the D.C. Circuit and it is possible that the Determination could be vacated and remanded again.¹⁴⁷ The FAA is attempting to lead the court away from the conflicting definitions of substantial adverse impact that exist in the Handbook, but this maneuver is unlikely to pass muster. The statutory authority under which the FAA operates requires the study of any structure that could impact the enumerated factors listed in the statute. Moreover, the obstruction standards under 14 C.F.R. § 77 are only one piece of the puzzle; there are other regulatory provisions which the court may find to be violated due to new information included in the second Determination.¹⁴⁸

As part of the second Determination, the FAA gathered data on VFR traffic to “respond to the court’s concern raised in [*Barnstable*].”¹⁴⁹ The FAA found that “some aircraft under VFR may have to alter their altitude or route of flight.”¹⁵⁰ In fact, the study concluded that for a nine-month period

¹³⁸ *Id.*

¹³⁹ *Id.* at 3.

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 6.

¹⁴⁶ *Id.*

¹⁴⁷ Petitioners from *Town of Barnstable* filed a Petition for Review of the FAA determination in the D.C. Circuit on August 22, 2012 and at the time of writing this Article, briefing was currently underway with no oral argument date scheduled. See Brief of Petitioners, Town of Barnstable, Massachusetts and Alliance to Protect Nantucket Sound v. Fed. Aviation Admin., (No. 12-1362), 2012 WL 6604718, at *1.

¹⁴⁸ See 14 C.F.R. § 91.119 which requires a 500 foot distance between objects and aircraft.

¹⁴⁹ STUDY NO. 2012-WTE-322-OE, *supra* note 12, at 4.

¹⁵⁰ *Id.* at 6.

between January and September 2011, there were 427 aircraft operating below 949 feet.¹⁵¹ This would cause a violation of 14 C.F.R. § 91.19, which requires a 500-foot clearance between aircraft and objects. The study also stated that 52% of VFR aircraft operations occurred over the southeast corner of the wind farm area, illustrating that a large percentage of aircraft may be impacted.¹⁵²

This data goes directly to the potential impacts listed in several sections of the Handbook. Section 6-3-4 establishes that a substantial adverse impact can be found when more than one aeronautical operation a day would be affected.¹⁵³ The data collected by the FAA shows that at least one flight a day could be impacted. Moreover, the data implicated two other sections of the Handbook that the court expressly mentioned in its first opinion. These are Section 6-3-5 and Section 6-3-8(b), which states that “any structure that would interfere with a significant volume of low altitude flights by actually excluding or restricting VFR operations in a specific area would have a substantial adverse effect and may be considered a hazard to air navigation.”¹⁵⁴

As the D.C. Circuit noted in *Barnstable*, the provisions in the Handbook identify multiple ways a structure can cause an adverse effect, especially for VFR traffic.¹⁵⁵ The idea that a structure has to be above a certain height and within a certain distance in order to cause an adverse effect, as 14 C.F.R. § 77 or Section 6-3-8(c)(1) prescribes, “simply identifies one circumstance ... potentially one among many.”¹⁵⁶ Considering the data the FAA provided, showing at least one flight per day could be impacted, it is plausible the court will reject the second No Hazard Determination.

VI. The Need For a Revised FAA Handbook

In *Barnstable*, *D&F*, and *Breneman*, the core issue ultimately addressed by the D.C. Circuit was whether the FAA followed its own guidelines for when structural interference exists. The first of these cases, *D&F*, was decided in 2000, so the interpretative issues raised by the Handbook are not new by any means. But the application of the Handbook to wind farm development is a novel issue, especially as the growth of the wind energy sector continues in the United States. Wind farms become more cost effective when they are located closer to population centers,¹⁵⁷ therefore conflicts related to when a structure poses a hazard will become more prevalent.¹⁵⁸

¹⁵¹ *Id.* at 7.

¹⁵² *Id.* at 7.

¹⁵³ *Id.* at 34.

¹⁵⁴ *Town of Barnstable*, 659 F.3d at 36.

¹⁵⁵ *Id.* at 35.

¹⁵⁶ *Id.*

¹⁵⁷ Bjorn Carey, *Offshore Wind Energy Could Power Entire East Coast*, STANFORD REPORT (Sept. 14, 2012), <http://news.stanford.edu/news/2012/september/offshore-wind-energy-091412.html> (last visited Sept. 23, 2013).

¹⁵⁸ *Wind Farms Run Into Turbulence With the FAA*, AVIATION AND AIRPORT DEVELOPMENT LAW NEWS (Jan. 25, 2010), <http://www.aviationairportdevelopmentlaw.com/2010/01/articles/faa-1/regulatory/wind-farms-run-into-turbulence-with-the-faa/> (last visited July 17, 2013).

Some recent scholarship has suggested that the United States should enact comprehensive legislative reforms for siting wind farms.¹⁵⁹ The problem with this solution is one of pragmatism: Congress currently appears to lack the necessary political will and cohesion in order to act on such matters. While the topic of wind farms seems mundane to the average observer, the politics surrounding alternative energy is complicated in part due to the partisan nature of alternative energy.¹⁶⁰ With Congress's inability to address even the most immediate problems facing the country, coupled with other pressing issues on the national agenda, legislation on alternative energy is unlikely to occur.¹⁶¹

Another commentator has also recommended that agencies involved in the permitting and siting of wind farms become more aware of the opposition to these projects and conduct more thorough analyses to provide better explanations of project approvals.¹⁶² However, this fails to recognize the fact that the FAA, as with other federal agencies, is facing a greater demand on its services without the corresponding increase in funding; the FAA is doing more with much less.¹⁶³ While the FAA's role in siting wind farms may be important, it is understandable that the FAA may not put the level of effort some want into this area considering the FAA's other obligations such as air traffic control, airplane and airline regulation, and air travel technology development.¹⁶⁴

Because Congress is unlikely to act and the FAA has few resources to tackle this issue, the FAA must find a cost-effective and independent method of remedying lengthy hazard determinations. The only viable solution is for the FAA to modify its own Handbook to make it easier for the agency to use and courts to interpret. By taking this small step, it will reduce its long-term costs and administrative

¹⁵⁹ See, e.g., Kenneth Kimmell & Dawn Stolfi Stalenhoef, *The Cape Wind Offshore Wind Energy Project: A Case Study of the Difficult Transition to Renewable Energy*, 5 GOLDEN GATE U. ENVTL. L.J. 197 (2011) (discussing the early permitting process for Cape Wind and recommending Congress enact a "one stop shop" for wind farm permitting); Gregory J. Rigano, *The Solution to the United States' Energy Troubles is Blowing in the Wind*, 39 HOFSTRA L. REV. 201 (2011) (discussing the environmental benefits of wind energy and the need for Congress to pass an "Offshore Energy Wind Act" which the author proposes a draft of); Erica Schroeder, *Turning Offshore Wind On*, 98 CAL. L. REV. 1631 (2010) (arguing for Congressionally enacted changes to the Coastal Zone Management Act).

¹⁶⁰ Matthew Mosk & Ronnie Green, *Did Obama Administration Cut Corners For a Green Energy Company*, ABC NEWS (May 24, 2011), <http://abcnews.go.com/Blotter/obama-administration-solyndra/story?id=13640783#.Ueb8HFMVLOQ> (last visited Sept. 23, 2013).

¹⁶¹ An observer of the American political system need only consider the fact that the Federal Government has been operating on a series of "Continuing Resolutions" since 2007 or the issues of gun control or tax reform to understand this statement to be true.

¹⁶² Heidi Willers, *Grounding the Cape Wind Project: How the FAA Played into the Hands of Wind Farm Opponents and What We Can Learn From It*, 77 J. AIR L. & COM. 605, 633-35 (2012).

¹⁶³ Until February 2012, the FAA operated under a series of 23 separate continuing funding resolutions from 2007 to 2012 and actually had a partial shutdown in early 2012. Keith Laing, *Obama Signs \$63B FAA Funding Bill into Law*, THE HILL (Feb. 14, 2012), <http://thehill.com/blogs/transportation-report/aviation/210649-obama-signs-63b-faa-funding-bill-into-law> (last visited Sept. 23, 2013). The bill signed by President Obama keeps funding levels at Fiscal Year 2011 levels and does not provide an increase many in Congress hoped for. Pete Kasperowicz, *House Approves First Long Term FAA Funding Bill in Eight Years*, THE HILL (Feb. 3, 2012), <http://thehill.com/blogs/floor-action/house/208535-house-approves-first-long-term-faa-funding-bill-in-eight-years> (last visited Sept. 23, 2013).

¹⁶⁴ *What We Do*, FED. AVIATION ADMIN., <http://www.faa.gov/about/mission/activities/> (last visited July 17, 2013).

burdens.¹⁶⁵ Specifically, the FAA should modify Chapter 6 of the Handbook in order to make the procedures for airspace management more streamlined. A possible solution would be to turn Sections 6-3-3, 6-3-4, and 6-3-5 into one new Section. This new section could read:

6-3-3 Substantial Adverse Impact

For a structure to have a substantial adverse impact, it must first exceed an obstruction standard under 14 C.F.R. § 77.17. If this exists, then there must also be at least one of the following conditions met for a substantial adverse impact to be found:

- a. Requires a change to an existing or planned IFR minimum flight altitude, a published or special instrument procedure, or an IFR departure procedure for a public-use airport.
- b. Requires a VFR operation to change its regular flight course or altitude. This does not apply to VFR military training route (VR) operations conducted under part 137, or operations conducted under a waiver or exemption to the CFR.
- c. Restricts the clear view of runways, helipads, taxiways, or traffic patterns from the airport traffic control tower cab.
- d. Derogates airport capacity/efficiency by impacting at least one aeronautical operation per day.
- e. Affects future VFR and/or IFR operations as indicated by plans on file.
- f. Affects the usable length of an existing or planned runway.
- g. Causes interference with the operation of air navigation or communication equipment.

This revised Section 6-3-3 would make clear how the factors for determining an obstruction are to be considered. It places all the possible factors under one section of guidance and gives a precise order as to when the factor should be considered. It also corresponds with the other sections of the Handbook that require a regulatory violation first, before looking at additional obstruction factors.¹⁶⁶ A change like this will make it easier for the FAA to apply, and courts to interpret, the Handbook and improve the efficiency of FAA determinations.

¹⁶⁵ A reader of this Article may be thinking, "Wouldn't it be costly and time consuming for the FAA to do this as well?" The response to that question is that the cost and time associated with issuing a clarification to its Handbook is far less than the years spent in court litigating matters of interpretation.

¹⁶⁶ Although Section 6-3-8(c)(1) is discussed in detail in this Article, there is no reason to change the language contained therein because it already requires a structure to be taller than 500 feet and be within 2 miles of a VFR route, thus Cape Wind does not trigger this Section. Order 7400.2G, *supra* note 32, at 6-3-8(c)(1).

If the FAA Handbook contained the above language, it is more likely than not that the initial determination on Cape Wind would have been upheld. This is because Cape Wind never would have triggered this “substantial adverse effect” language based upon the fact it did not exceed the standards in 14 C.F.R. § 77.17. The “substantial adverse impact” argument can be used by the opponents of Cape Wind only because the current version of the Handbook does not define substantial adverse impact as needing the pre-requisite regulatory violation of 14 C.F.R. § 77.17. The proposed language removes their main argument, addresses the problems specified by the D.C. Circuit in *Barnstable*, and curtails the likely argument of future anti-wind farm advocates.

VII. Conclusion

The Cape Wind project is an example of the problems that face wind energy development projects in the United States.¹⁶⁷ Not only are there political implications from nearby residents and other special interest groups,¹⁶⁸ but a host of regulatory challenges which wind farm proponents may not even consider including the obtainment of FAA approvals due to the height and other aeronautical issues associated with wind turbines.

As more wind farm projects are proposed, challenges to their construction will also increase. The FAA will continually be placed in the position of determining whether these projects have an adverse effect on air traffic. While the benefits and pitfalls of wind energy may be at the core of many challenges, it is the role of the judiciary to focus not on those issues, but on whether the proper regulatory prescriptions were followed.¹⁶⁹ In the case of Cape Wind, the D.C. Circuit was justified in its holding that the FAA did not properly follow its own Handbook in determining whether the wind turbines would cause an adverse impact to air traffic. Because the FAA failed to appropriately address those issues in its most recent Determination of No Hazard, the latest challenge to Cape Wind will likely

¹⁶⁷ Not all energy windmills face opposition. For example, Atlantic City, N.J. hosts five 380-foot windmills directly on the bay and has found that the windmills have not only increased tourism, but also home values with views of the windmills have increased faster than those without the view. Molly Golubcow, *Tourism that Blows*, ATLANTIC CITY WEEKLY (Jan. 26, 2006), http://www.atlanticcityweekly.com/arts-and-entertainment/features/tourism_that_blows-50733287.html (last visited Sept. 23, 2013).

¹⁶⁸ In addition to concerns noted previously, Congress has also gotten involved. On August 8, 2012, Congressman Darrell Issa (R-CA), Chairman of the Committee on Oversight and Government Reform, wrote a letter to President Obama suggesting the President’s support for wind energy programs created political pressures on the FAA to approve the project. Letter from Congressman Darrell Issa, Chairman, U.S. House of Representatives Committee on Oversight and Government Reform, to President Barak Obama at 4 (Aug. 8, 2012), available at <http://oversight.house.gov/wp-content/uploads/2012/08/Chairman-Issa-to-President-Obama-8-8-12.pdf>. Further evidence of the polarized nature of Cape Wind can be found in a letter from APNS President Audra Parker to the FAA which suggests the FAA succumbed “to political pressure with suboptimal decisions leading to serious public safety risks.” Letter from Audra Parker, President and CEO, Save our Sound, to Michael Huerta, Acting Administrator, Federal Aviation Admin. at 12. (May 22, 2012), available at <http://www.saveoursound.org/userfiles/files/APNS%2BLetter%2Bto%2BFAA%2Bre%2BFOIA%2B5%2B22%2B12%5B1%5D.pdf>.

¹⁶⁹ The D.C. Circuit did note that “while of course the wind farm may be one of those projects which such overwhelming policy benefits (and political support) as to trump all other considerations, even as they relate to safety, the record expresses no such proposition.” *Town of Barnstable*, 659 F.3d at 33.

be successful, thus delaying the project even further. The FAA should learn from this experience and make changes to its Handbook as suggested in this Article. Doing so would be prudent, so as to not impede worthy wind farm projects, but also to reduce agency costs spent on permit reviews as resources become scarcer. Wind farm development is here to stay and the FAA cannot rely on Congress or the judiciary to rescue it from its regulatory obligations; it must fix its own problems from the inside.