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Michael DeLoreto

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

*“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 Vinci<sup>1</sup>*

I. Introduction

This paper examines the Court of Appeals for the D.C. Circuit’s decision in *Town of Barnstable v. FAA*<sup>2</sup> which stalled development of a major offshore wind farm project. Harnessing the wind to power human activity started in early 500 A.D. when Persians constructed the first known windmills.<sup>3</sup> In 1854, the first known windmill that would spin in whatever direction the wind blew and could automatically slow itself down was invented here in the United States.<sup>4</sup> Americans have continued in the tradition of ingenuity to capture the power of Nature, but with much greater efficiency and far more developed technology.<sup>5</sup> Over 51,000 megawatts of power is generated from wind in the United States today and our nation accounts for twenty percent of the global generation of wind energy.<sup>6</sup> This number 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.<sup>7</sup>

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\* J.D. Candidate, 2014, Seton Hall University School of Law; M.P.A., University of Pennsylvania.; B.A., Drew University. The author thanks his wife and family for their ongoing support and his faculty advisor, Professor Marc Poirier, for his guidance during the writing process.

<sup>1</sup> NOTEBOOKS OF LEONARD DA VINCI, XIV, (Jean Paul Richter ed., 1880).

<sup>2</sup> 659 F.3d 28, 31 (D.C. Cir. 2011).

<sup>3</sup> Phyllis Mckenzie, *World History of Windmills*, [http://www.utexas.edu/gtc/assets/pdfs/windmills\\_world.pdf](http://www.utexas.edu/gtc/assets/pdfs/windmills_world.pdf) (last visited Sept. 15, 2012).

<sup>4</sup> *Id.* This technology was developed by Daniel Halladay of Connecticut. *Id.*

<sup>5</sup> 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>.

<sup>6</sup> *Industry Statistics*, AM. WIND ENERGY ASS’N, [http://www.awea.org/learnabout/industry\\_stats/index.cfm](http://www.awea.org/learnabout/industry_stats/index.cfm) (last visited November 10, 2012). 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](http://www.tradewindenergy.com/windlibrary_sub.aspx?id=136) (last visited October 12, 2012).

<sup>7</sup> Press Release, Dep’t of the Interior, *Salazar, Chus 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 by 2020 for 2.8 million homes and 15.2 million homes by 2030. *Id.*

The first of these major offshore wind projects in the United States was slated to be Cape Wind, located off the coast of Massachusetts in Nantucket Sound.<sup>8</sup> Cape Wind is expected to have 130 turbines located between five and thirteen miles from the Massachusetts shoreline.<sup>9</sup> This project can generate 174 megawatts of energy on average, with a maximum generating capacity of 486 megawatts.<sup>10</sup> Cape Wind advocates claim that this wind farm will be able to provide seventy-five percent of all the power needed for Cape Cod, Martha's Vineyard, and Nantucket.<sup>11</sup>

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).<sup>12</sup> In January 2011, the Town of Barnstable, Massachusetts and the non-profit group The Alliance to Protect Nantucket

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<sup>8</sup>*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 September 10, 2012). 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, NJ which may be completed before Cape Wind due to the ongoing litigation which is the focus of this comment. 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's-USACOE-Permits.pdf>.

<sup>9</sup> *Frequently Asked Questions – Cape Wind Basics*, CAPE WIND, <http://www.capewind.org/FAQ-Category4-Cape+Wind+Basics-Parent0-myfaq-yes.htm> (last visited September 10, 2012).

<sup>10</sup> *Id.*

<sup>11</sup> *Id.* The entire area of Cape Cod, Martha's Vineyard, and Nantucket used 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&hold=0>.

<sup>12</sup> Robert F. Kennedy, Jr., *An Ill Wind Off Cape Cod*, N.Y. TIMES, (Dec. 16, 2005) available at <http://www.nytimes.com/2005/12/16/opinion/16kennedy.html>; Press Release, DEP'T OF THE INTERIOR, *Secretary Salazar Announces Approval of Cape Wind Energy Project on Outer Continental Shelf of Massachusetts* (April 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>; *Determination of No Hazard to Air Navigation*, FED. AVIATION ADMIN. STUDY NO. 2009-WTE-332-OE (2010) available at [http://www.capecodtoday.com/downloads/capewind\\_dnh.pdf](http://www.capecodtoday.com/downloads/capewind_dnh.pdf) (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.

Sound filed an action in the Court of Appeals for the D.C. Circuit to stop the wind farm from being constructed.<sup>13</sup> The petitioners argued that the FAA determination stating the wind turbines did not pose a hazard to aviation was issued arbitrarily and capriciously.<sup>14</sup> Their reasoning was the FAA “misread its own regulations, and . . . failed to calculate the dangers posed to local aviation.”<sup>15</sup> Although the FAA opposed the relief sought, the D.C. Circuit vacated the FAA decision and remanded the determination back to the FAA.<sup>16</sup> Taking the court’s opinion into account, the FAA conducted a new inquiry and released a secondary determination still finding that Cape Wind was not a hazard to air travel.<sup>17</sup>

This comment will argue the Court of Appeals for the District of Columbia was arguably 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 fatal flaw in its second determination. In support of this thesis, Part II of the comment will give an overview of the approval process for Cape Wind and explain the required FAA determination. Part III will explore the FAA’s initial no hazard determination findings regarding Cape Wind. Part IV will summarize the arguments made by the parties of the *Barnstable* case and will address the D.C. Circuit’s holding. Part V will discuss why the FAA’s second determination is still deficient under the *Barnstable* holding. Finally, Part VI will propose solutions to avoid future challenges to FAA No Hazard Determinations, specifically including a revision to the FAA’s own regulations.

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<sup>13</sup> *Town of Barnstable v. Fed. Aviation Admin.*, 659 F.3d 28, 31 (D.C. Cir. 2011).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Id.* at 31, 36.

<sup>17</sup> *Determination of No Hazard to Air Navigation*, FED. AVIATION ADMIN., STUDY NO. 2012-WTE-322-OE, (2012) available at <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=displayOECCase&oeCaseID=157246996> (hereinafter “Study No. 2012-WTE-322-OE”).

## II. Permitting Cape Wind and The Need for FAA Determinations

As the first proposed offshore wind project, Cape Wind entered uncharted statutory and regulatory territory from its earliest stages. Cape Wind sought its first permit in 2001 from the Army Corps of Engineers (“the Corps”), which assumed authority under the Rivers and Harbors Act of 1899 (“RHA”) to manage permitting for offshore wind energy projects, but without any explicit statutory authority.<sup>18</sup>

Section 10 of the RHA gave the Corps the ability to permit obstructions to navigable waters of the United States.<sup>19</sup> The Outer Continental Shelf Land Act (“OCSLA”) expanded the Corps authority to the Outer Continental Shelf.<sup>20</sup> While there was no authority under either RHA or OCSLA for the Corps to grant leases for wind energy use on federal lands, in contrast, the Federal Land Policy and Management Act did give authority for the DOI to license onshore wind energy projects.<sup>21</sup> This discrepancy between licensing onshore and offshore wind projects was addressed by the Energy Policy Act of 2005 which expressly granted the DOI—working in cooperation with other federal agencies—to grant leases on the Outer Continental Shelf for certain activities including wind energy production.<sup>22</sup> Subsequently, the DOI and the Federal Energy Regulatory Commission (FERC) signed a Memorandum of Understanding confirming

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<sup>18</sup> 33 U.S.C. §§ 407-468 (2012). Ann Yarling, *Increasing Offshore Wind Projects: A Focus on Regulatory Authority*, (March 8, 2012) available at <http://www.natlawreview.com/article/increasing-offshore-wind-projects-focus-regulatory-authority>.

<sup>19</sup> 33 U.S.C. §§ 407-468 (2012).

<sup>20</sup> ADAM VANN, CONG. RESEARCH SERV., R40175, WIND ENERGY: OFFSHORE PERMITTING 4 (2012). The Outer Continental Shelf extends from the U.S. coastline and outward for 200 nautical miles. *Id.* at 1.

<sup>21</sup> 43 U.S.C. § 1701 (2012); VANN *supra* note 20 at 3.

<sup>22</sup> 43 U.S.C. § 1337(p)(1) (2012); VANN *supra* note 20 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).

the exclusive jurisdiction of the Secretary of the Interior over renewable energy projects on the Outer Continental Shelf.<sup>23</sup> By 2006, the Cape Wind project was under the authority of DOI.

While DOI maintained authority over the Cape Wind project per the Energy Policy Act of 2005, the Act still required DOI to work in consultation with other federal agencies.<sup>24</sup> One such agency was the Federal Aviation Administration (FAA).<sup>25</sup> Congress specifically tasked the Secretary of Transportation, who delegated this power to the FAA, to study any structures that may interfere with air commerce.<sup>26</sup> Congress enumerated the specific factors considered when studying a structure's impact on air travel to be:

- The impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules (VFR);
- Impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules (IFR);
- 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.<sup>27</sup>

Under this Congressional mandate, the FAA promulgated rules as to when a project triggers a review for interference with air commerce.<sup>28</sup> These regulations state that when a

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<sup>23</sup> VANN *supra* note 20 at 5. DOI granted its authority to site offshore energy projects to one of its agencies, the Mineral Management Service (MMS). *Id.* The MMS later became the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEM) as part of a major reorganization within the Department of Interior following the Deepwater Horizon explosion, commonly known as the BP Oil Spill. Press Release, DEP'T OF THE INTERIOR, *Interior Department Completes Reorganization of the Former MMS*, (Sept. 30, 2011) available at <http://www.doi.gov/news/pressreleases/Interior-Department-Completes-Reorganization-of-the-Former-MMS.cfm>.

<sup>24</sup> See sources cited *supra* note 21 and accompanying text.

<sup>25</sup> 49 U.S.C. § 44718 (2012).

<sup>26</sup> *Id.* While not the purpose of this comment, 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.

<sup>27</sup> 49 U.S.C. §§ 44718(b)(1)(A)-(E) (2012).

<sup>28</sup> Safe, Efficient Use, and Preservation of the Navigable Airspace, 14 C.F.R. § 77 (2012).

structure's height exceeds 200 feet the FAA must be notified.<sup>29</sup> 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.<sup>30</sup> Because of the height of each turbine, Cape Wind was required to notify the FAA of the project and thus the FAA began a determination of whether the turbines created a hazard to air traffic.

#### A. The FAA Determination Process

To determine if a structure like the Cape Wind turbines will cause an impact on air travel, the FAA regulations determine when an obstruction exists and how a study of that object should be conducted.<sup>31</sup> The FAA rules state that an object is an obstruction if it is taller than 499 feet.<sup>32</sup> When the FAA conducts a study of an object that considered an obstruction, it seeks to determine the impact:

- For aircraft operating under VFR;
- On aircraft operating under IFR;
- On existing and planned public use airports; airport traffic capacity;
- On obstacle clearance altitudes, approach procedures, and departure procedures;
- On impacts on radar facilities, communications, and other surveillance systems;
- The cumulative impact of the proposed structure when combined with all other effects.<sup>33</sup>

Based upon the findings of the study, the FAA will then make a determination as to whether the obstruction will be a hazard to air navigation.<sup>34</sup> This determination will identify the effects on air traffic departure and arrival; air traffic procedures; minimum flight altitudes; and

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<sup>29</sup> Construction or alteration requiring notice, 14 C.F.R. § 77.9 (2012).

<sup>30</sup> See sources cited *supra* note 8.

<sup>31</sup> 14 C.F.R. § § 77.13 through 77.35 (2012).

<sup>32</sup> Obstruction standards, 14 C.F.R. § 77.17 (2012).

<sup>33</sup> Evaluating aeronautical effect, 14 C.F.R. § 77.29(a)(1)-(7) (2012).

<sup>34</sup> Determinations, 14 C.F.R. § 77.31 (2012).

impacts on air navigation facilities, communications, and surveillance systems.<sup>35</sup> When there will be a substantial aeronautical impact, the FAA will then issue a Determination of Hazard to Air Navigation.<sup>36</sup> Conversely, when the study concludes “that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation” or when no obstruction standard is exceeded, the FAA will issue a Determination of No Hazard.<sup>37</sup> Although a Determination of No Hazard might be issued, the determination may include conditional provisions, limits to minimize potential problems, supplemental notices, or even marking and lighting requirements.<sup>38</sup>

Once a determination has been made, the FAA provides an internal appeals process called a Petition for Discretionary Review.<sup>39</sup> The intent of this review is so individuals who were not given a prior opportunity can put forth substantive aeronautical comments related to the proposal, such as alleged impacts on air travel and radar systems.<sup>40</sup> 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.”<sup>41</sup>

To provide further internal guidance, the FAA issued Order JO 7400.2G (“the Handbook”) which creates uniform procedures to be used in the administration of airspace management.<sup>42</sup> 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;

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<sup>35</sup> *Id.* at (b)(1)-(2).

<sup>36</sup> *Id.* at (c).

<sup>37</sup> *Id.* at (d)-(e).

<sup>38</sup> *Id.* at (d)(1)-(4).

<sup>39</sup> Petitions for Discretionary Review, 14 C.F.R. §§ 77.37 through 77.41 (2012).

<sup>40</sup> 14 C.F.R. § 77.37(a) (2012).

<sup>41</sup> 14 C.F.R. § 77.39(b) (2012).

<sup>42</sup> FED. AVIATION ADMIN., PROCEDURES OF HANDLING AIRSPACE MATTERS, Order JO 7400.2G (April 10, 2008) available at <http://www.faa.gov/documentLibrary/media/Order/7400.2G.pdf> (hereafter cited as “Order JO 7400.2G”).

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.*<sup>43</sup>

Part Two of the Handbook supplements the statutory and regulatory framework Congress and the FAA have established for addressing structures interfering with airspace.<sup>44</sup> When conflicts in airspace use arise, the FAA emphasizes the need to protect airspace for air navigation and protect air navigation facilities from either “electromagnetic or physical encroachments.”<sup>45</sup> Should a proposed project and airspace use conflict, the Handbook again states first priority should be given to altering the project.<sup>46</sup>

Chapter Six of the Handbook details the process by which the aeronautical study required by the FAA regulations is to be conducted and how to evaluate whether aeronautical impacts exist.<sup>47</sup> A structure has an adverse effect when it exceeds one of standards in the regulation, including being of a height of over 499 feet or having a physical or electromagnetic impact on air navigation facilities.<sup>48</sup> Other specifically enumerated adverse effects include:

- a) Changes 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) Changes to a VFR operation, to change its regular flight course or altitude;
- c) Restricting the clear view of runways, helipads, taxiways, or traffic patterns from the airport traffic control tower cab;
- d) Derogating airport capacity/efficiency;

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<sup>43</sup> *Id.* at 1-2-1 (emphasis added).

<sup>44</sup> *Id.* at 5-1-1 (“The guidelines, procedures, and criteria detailed in this part supplement those contained in part 77, Objects Affecting Navigable Airspace . . .”); 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 . . .”)

<sup>45</sup> *Id.* at 6-3-1(a).

<sup>46</sup> *Id.* at 6-3-1(b).

<sup>47</sup> *Id.* at 6-1-1 through 6-3-37.

<sup>48</sup> Order JO 7400.2G at 6-3-3.

- e) Affecting future VFR and/or IFR operations as indicated by plans on file; or
- f) Affecting the usable length of an existing or planned runway.<sup>49</sup>

Although Section 6-3-3(b) states that an adverse effect exists when VFR operations are impacted, Section 6-3-8(c)(1) states: “A structure would have an adverse effect upon VFR air navigation if its height is greater than 500 feet above the surface at its site, and within 2 statute miles of any regularly used VFR route.”<sup>50</sup> The Handbook also specifies that a structure could cause a substantial impact through a combination of adverse effects, such as impacting both flight courses and a significant volume of activity could be impacted.<sup>51</sup> 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.”<sup>52</sup>

### III. The FAA Initial Determination of No Hazard

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.<sup>53</sup> The 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*.<sup>54</sup>

As part of the Determination of No Hazard process, the FAA circulated the proposal on February 13, 2009 to “all known aviation interests and to non-aeronautical interests that may be

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<sup>49</sup> *Id.* at 6-3-3(a)-(f). VFR Rules allow the pilot to be able to operate the aircraft based upon his visual reference with the ground and surroundings while 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. *See Redhead v. U.S.*, 686 F.2d 178, 180 at n.1 (3d Cir. 1982).

<sup>50</sup> *Id.* at 6-3-8(c)(1).

<sup>51</sup> *Id.* at 6-3-5.

<sup>52</sup> *Id.* 6-3-4.

<sup>53</sup> Study No. 2009-WTE-332-OE, at 2.

<sup>54</sup> *Id.* (emphasis added).

affected by the proposal.”<sup>55</sup> It allowed one year for interested persons to review the study and comment, with the period for comment extended from an original deadline of March 22, 2009 to April 30, 2010.<sup>56</sup> Fourteen letters of objection were filed with the FAA, and their comments with FAA responses made up a more than fifty percent of the Determination of No Hazard document issued on May 17, 2010.<sup>57</sup> Some of the comments filed with the FAA were outside the scope the aeronautical study such as commenter concerns on the environmental noise impacts of the wind farm on the mainland and that the type of wind turbine used was improper.<sup>58</sup> There were, however, two areas of concern for the commenters that did fall under the FAA purview: the impact on flights operating under VFR and the impact on air traffic control radar.<sup>59</sup>

#### A. VFR Flight Concerns

Public comments against Cape Wind first focused on the adverse impacts to VFR navigation.<sup>60</sup> 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 1000 feet to altitudes of 1000 feet or higher in order to avoid the turbines.<sup>61</sup> Additionally, Nantucket Sound is subject to poor weather, which may create navigation issues for VFR pilots who may need to stay at certain altitudes to maintain visual observation.<sup>62</sup> The FAA did not agree with the commenter’s concerns; it stated that the “proposed wind turbines [did] not exceed any 14 C.F.R. Part 77 obstruction standards.”<sup>63</sup> The FAA did state however that “some aircraft

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<sup>55</sup> *Id.* at 4.

<sup>56</sup> *Id.*

<sup>57</sup> *See* sources cited *supra* note 53.

<sup>58</sup> *Id.* at 4-5.

<sup>59</sup> Study No. 2009-WTE-332-OE, at 5.

<sup>60</sup> *Id.*

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> *Id.* (alteration from original). 14 C.F.R. § 77 requires a height of 499 feet or higher to be an obstruction. *See* sources cited *supra* notes 26-28 and discussion.

operating under visual flight rules (VFR) *may have to alter their altitude or route of flight.*<sup>64</sup> The FAA further noted that the Cape Wind project is within two statute miles of a regularly used VFR route.<sup>65</sup> 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.<sup>66</sup> In the Determination, the FAA did not address Section 6-3-3(b) which states a structure has an adverse impact when it requires “a VFR operation, to change its regular flight course or altitude.”<sup>67</sup> The FAA went on to note that the wind mill structures would be marked and/or lighted to make them “conspicuous to airmen should circumnavigation be necessary.”<sup>68</sup>

#### B. Impact on Radar Facilities

Most commenters took issue with the impacts on the three radar facilities which provide for the detection of aircraft in the Nantucket Sound area.<sup>69</sup> 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.<sup>70</sup> 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

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<sup>64</sup> Study No. 2009-WTE-332-OE, at 7 (emphasis added).

<sup>65</sup> *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. *Conversion Table For Nautical Miles and Statute Miles*, NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (2012), [http://msi.nga.mil/MSISiteContent/StaticFiles/NAV\\_PUBS/DBP/endtables.pdf](http://msi.nga.mil/MSISiteContent/StaticFiles/NAV_PUBS/DBP/endtables.pdf).

<sup>66</sup> *Id.*

<sup>67</sup> *Id.* See sources cited *supra* note 49 and accompanying text.

<sup>68</sup> *Id.*

<sup>69</sup> *Id.* at 5. The three radar facilities are North Truro Cape (QEA), Nantucket (ACK), and Otis Air Force Base (FMH). *Id.*

<sup>70</sup> Study No. 2009-WTE-332-OE, at 5. The FAA reached this conclusion after conducting its own study as well as reviewing the studies provided by certain commenters. *Id.* 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 TUTORIAL, <http://www.radartutorial.eu/11.coherent/co04.en.html> (last visited January 4, 2013).

multiple wind turbines within a confined area.”<sup>71</sup> The cumulative effect of the wind turbines’ rotation on the FMH radar system would be expected to reduce search radar detection for aircraft at all altitudes above the wind farm.<sup>72</sup> 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.<sup>73</sup> With this agreement in place, the FAA concluded “there [would] not be a significant adverse effect to radar services in Nantucket Sound.”<sup>74</sup>

### C. Petition for Discretionary Review

Taking all the cumulative impacts of the Cape Wind project into account, the FAA did not consider the project to have a “substantial adverse effect” when it issued the Determination of No Hazard.<sup>75</sup> As previously noted, the FAA has an internal appeals mechanism to allow those in disagreement with the decision to petition for discretionary review.<sup>76</sup> Various persons opposed to Cape Wind filed a Petition for Discretionary Review which the FAA accepted as procedurally valid.<sup>77</sup> The FAA 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

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<sup>71</sup> Study No. 2009-WTE-332-OE 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. 102<sup>ND</sup> INTELLIGENCE WING <http://www.102iw.ang.af.mil/> (last visited November 5, 2012).

<sup>72</sup> Study No. 2009-WTE-332-OE at 6.

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

<sup>75</sup> *Id.* at 7.

<sup>76</sup> See sources cited *supra* notes 39-41 and accompanying text.

<sup>77</sup> Brief for Petitioner at 23, *Town of Barnstable v. Fed. Aviation Admin.*, 659 F.3d 28 (D.C. Cir. 2011) (No. 10-1276).

adverse effect on VFR operations.<sup>78</sup> The rejection also stated that because the FAA mitigated the impacts on radar system disruption, there was no cumulative impact.<sup>79</sup>

#### IV. *Town of Barnstable v. FAA* and 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 Federal Aviation Administration (FAA).<sup>80</sup> The Town of Barnstable asserted it was harmed by the FAA No Hazard Determination because it is the operator of the Barnstable Municipal Airport (HYA) and also has an eight mile coastline along Nantucket Sound.<sup>81</sup> HYA is the third busiest airport in the State of Massachusetts with 108,657 flights occurring in 2009.<sup>82</sup> Of those flights, 84,593 occurred under VFR as compared to 24,064 which occurred under IFR.<sup>83</sup> 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.”<sup>84</sup> Their claim of harm was that their commercial, environmental, and recreational interest at and around the wind farm site would be detrimentally impacted.<sup>85</sup>

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<sup>78</sup> Brief for Respondent at 12, *Town of Barnstable v. Fed. Aviation Admin.*, 659 F.3d 28 (D.C. Cir 2011) (No. 1-1276).

<sup>79</sup> *Id.*

<sup>80</sup> Brief for Petitioner at 1.

<sup>81</sup> *Id.* at 22.

<sup>82</sup> *Id.*

<sup>83</sup> *Id.*

<sup>84</sup> *Id.* at 11.

<sup>85</sup> *Id.* at 11-12. As an aside, the opposition is a prime example of NIMBY (Not In My Backyard). These NIMBY concepts are listed in a Robert F. Kennedy, Jr., op-ed 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. See source cited *supra* note 12 and discussion. 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, (2012) <http://www.greenpeace.org/usa/en/campaigns/global-warming-and-energy/polluterwatch/Bill-Koch/>. While APNS claims to be concerned with the environmental impacts, major environmental special interest groups support

## A. Petitioner and Respondent Briefs

The first argument raised in both the petitioners and FAA briefs was the issue of whether the parties even had standing to bring the suit.<sup>86</sup> The Town of Barnstable argued for standing to challenge the FAA determination on the grounds it would be harmed as the owner/operator of HYA.<sup>87</sup> 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.<sup>88</sup> APNS used an affidavit of its President in order to establish the harm to aviation, economic livelihood, and recreational activities, to establish standing as an organization.<sup>89</sup>

The FAA disputed the standing of the parties, in particular 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.”<sup>90</sup> The FAA asserted that there was not only no threat of immediate harm from Cape Wind, but the FAA had no ability to stop the building of the project—only the Department of the Interior did—therefore the FAA determination cannot be traceable to their injury.<sup>91</sup> 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

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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 (2012) <http://www.capewind.org/article47.htm>.

<sup>86</sup> See generally Petitioners’ Brief at 5-7, 26; Respondent’s Brief at 17. Although not the focus of this comment, a brief discussion on standing is necessary in order to better understand the parties’ position and the court holding.

<sup>87</sup> Petitioner’s Brief at 26.

<sup>88</sup> See *Friends of Earth, Inc. v. Laidlaw Envtl. Servs. Inc.*, 528 U.S. 167, 181 (2000).

<sup>89</sup> *Id.* See also Affidavit of Audra Parker, Addendum to Petitioners’ Brief at ¶¶ 5-7.

<sup>90</sup> Respondent Brief at 17 (quoting *Summers v. Earth Island Institute*, 555 U.S. 488, 493 (2009)).

<sup>91</sup> *Id.* at 18 (citing *BFI Waste Sys. Of N. Am., Inc. v. FAA*, 293 F.3d 527, 530 (D.C. Cir. 2002)).

28, 2010 but that the FAA Determination of No Hazard was not released until May 10, 2010.<sup>92</sup> Therefore, the FAA claimed it really had no control over the final issuance of permits for Cape Wind, only the Department of the Interior did.<sup>93</sup>

Aside from standing, the true issue in dispute was the question of whether the FAA properly followed its own substantive standards. APNS and the Town's argument rested on the premise 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 taking into account the interference with air navigation.<sup>94</sup> 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).<sup>95</sup> 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.<sup>96</sup> The Town and APNS asserted that the FAA's issuance of a Determination of No Hazard was arbitrary and capricious because the decision did not comport with what the Handbook prescribed.<sup>97</sup> In other words, the FAA failed to follow its own guidance.

The Handbook instructs that the first priority of the FAA is the protection of airspace and that altering the proposal should be the first priority in the case of conflicts.<sup>98</sup> The Handbook goes on to state that an adverse effect exists when there is an obstruction standard violation under

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<sup>92</sup> *Id.* at 21.

<sup>93</sup> *Id.*

<sup>94</sup> Petitioners' Brief at 16.

<sup>95</sup> *See supra* note 26 and accompanying text.

<sup>96</sup> Petitioners' Brief at 18-19. *See supra* Section II-A.

<sup>97</sup> *Id.* at 19-20.

<sup>98</sup> Order 7400.2G at 1-2-1. Petitioners' Brief at 18.

14 C.F.R. 77 and/or an impact on air navigation facilities.<sup>99</sup> This existed here because there was an impact on radar facilities.<sup>100</sup> In addition, because the FAA found that there would have to be changes to certain aircraft operating under VFR, petitioners assert this meant there was an adverse impact under 6-3-3(b).<sup>101</sup> Moreover, since the FAA found that some VFR aircraft would be impacted, this could be a combination of impacts under 6-3-5.<sup>102</sup> 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.<sup>103</sup>

The FAA disputed the petitioners' view and claimed it met their statutory and regulatory obligations. First, the FAA stated that the statutory and regulatory authority tells the FAA when to conduct an aeronautical study and what should be taken into account as a part of that study.<sup>104</sup> The FAA claimed it did exactly that and where the statute fell silent, it filled in the gaps with the regulations and Handbook.<sup>105</sup> Therefore, the FAA claimed it should be owed *Chevron* deference because Congress told them to conduct the study, leaving how to use and apply the findings of the study up to the FAA.<sup>106</sup>

Second, the FAA claimed it followed prior court precedent and its decision in Cape Wind was generally consistent with prior determinations it had made. The FAA noted that agency interpretations of its own regulations are controlling unless plainly erroneous or inconsistent with the regulation.<sup>107</sup> The D.C. Circuit held on a prior occasion that the FAA should also issue a

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<sup>99</sup> Order 7400.2G at 6-3-3.

<sup>100</sup> *See supra* Section III-B.

<sup>101</sup> *See supra* notes 63-64 and accompanying text.

<sup>102</sup> Petitioners' Brief at 40. *See supra* note 50 and accompanying text.

<sup>103</sup> Order 7400.2G at 7-1-3(c) (emphasis added).

<sup>104</sup> Respondent Brief at 5.

<sup>105</sup> *Id.* at 14-15.

<sup>106</sup> *Id.* at 29-30. *See also* *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 843-844 (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.

<sup>107</sup> *Auer v. Robbins*, 519 U.S. 452, 461 (1997).

finding of a hazard when the structure exceeded the 14 C.F.R. 77 standards or had an effect on local air navigation facilities.<sup>108</sup> Because the FAA claimed it also took into account and answered all the comments and issues raised during the public comment period, the FAA asserted it met its obligations to adequately explain its results and respond to relevant and significant public comments.<sup>109</sup>

#### B. Overview of the Court Opinion

On October 28, 2011, the D.C. Circuit decided *Barnstable*, holding that the petitioners had standing and that the FAA determination was vacated and remanded. 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 Department of Interior (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 hazard determination and compliance with any mitigation measures.<sup>110</sup> This reliance by the DOI on the FAA created a redressability issue because it would be “improbable” that the FAA’s determination would be “blithely disregarded.”<sup>111</sup>

On the substantive matter of the No Hazard Determination, the court held the determination was indeed arbitrary and capricious because the FAA departed from the Handbook.<sup>112</sup> The court based this reasoning off the varying definitions of “substantial adverse effect” which existed throughout the Handbook. For example, substantial adverse impact is defined in 6-3-3 of the Handbook as existing when there is an obstruction standard violation

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<sup>108</sup> D&F Alfonso Realty Trust v. Garvey, 216 F.3d 1191, 1195 (D.C. Cir. 2000).

<sup>109</sup> 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 & FN 58 (D.C. Cir. 1977)).

<sup>110</sup> Town of Barnstable v. Fed. Aviation Admin., 659 F.3d 28, 31-32 (D.C. Cir. 2011)

<sup>111</sup> *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.

<sup>112</sup> *Id.* at 34.

under 14 C.F.R. 77 or when there is an effect on the operations of the air traffic system.<sup>113</sup> 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 states there could be a substantial adverse effect if there is a cumulative impact under Sections 6-3-3 and 6-3-4.<sup>114</sup> Yet in the view of the FAA, all these prior definitions are seemingly irrelevant because of Section 6-3-8(c)(1), which 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.<sup>115</sup> Because the FAA put its sole reliance on the definition of substantial adverse impact under Section 6-3-8(c)(1) without addressing the other issues raised 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.”<sup>116</sup>

### C. The *Barnstable* Holding’s View on Agency Deference

The D.C. Circuit’s ruling in *Barnstable* greatest impact was in the area of the amount of deference an agency can expect with regard to interpreting its own rules.<sup>117</sup> 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.<sup>118</sup> 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

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<sup>113</sup> *Id.* at 35.

<sup>114</sup> *Id.* at 34.

<sup>115</sup> *Id.* at 35.

<sup>116</sup> *Town of Barnstable v. FAA* at 35.

<sup>117</sup> Whether the court correctly found the parties to have standing is a different matter and this comment does not focus on that issue. At least one observer stated the court decided the standing question correctly as either expanding the *Bennett* decision to just applying *Bennett* in its logical application. *See, e.g.,* Barbara E. Lichman, *D.C. Circuit Court of Appeals Takes FAA to the Woodshed in Cape Cod Wind Farm Case*, AVIATION & AIRPORT DEVELOPMENT LAW NEWS (November 2, 2011), <http://www.aviationairportdevelopmentlaw.com/2011/11/articles/faa-1/litigation-1/dc-circuit-court-of-appeals-takes-faa-to-the-woodshed-in-cape-cod-wind-farm-case/>.

<sup>118</sup> CHARLES H. KOCH, ADMINISTRATIVE LAW & PRACTICE, § 10.23 (2012). Regulations, like 14 C.F.R. § 77, are promulgated under the Administrative Procedures Act. 5 U.S.C. § 553 (2012).

inconsistent with the regulation.<sup>119</sup> In the Administrative Procedures Act, which sets forth the standard of judicial review governing federal agency decisions in the absence of an explicit provisions of the enabling act, decisions can be set aside as “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.”<sup>120</sup> Most court decisions note that this deference is not controlling, rather 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.<sup>121</sup>

Because *Barnstable* turns on the FAA’s interpretation of its Handbook and its regulations in promulgating the hazard determinations, the court’s level of review should be deferential unless the FAA decision was completely misguided. *Auer v. Robbins* is the leading case in this area.<sup>122</sup> In *Auer*, police sergeants and a lieutenant in the St. Louis Police Department sued under the Fair Labor Standards Act claiming they were owed overtime pay.<sup>123</sup> The City of St. Louis argued the officers were exempt from overtime pay as executive level personnel.<sup>124</sup> The Department of Labor had previously 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.”<sup>125</sup> 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

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<sup>119</sup> *Id.* at § 10.26. The concept of “plainly erroneous and inconsistent” stems from *Bowles v. Seminole Rock*, 325 US 410, 413-414 (1945) whether 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*.

<sup>120</sup> 5 U.S.C. § 706(2)(A) (2012).

<sup>121</sup> *Motor Vehicle Mfrs. Assn. v. State Farm Mutual Automobile Ins. Co.*, 463 U.S. 29, 43 (1983)(citing *Burlington Truck Lines, Inc. v. U.S.*, 371 U.S. 156, 168 (1962)).

<sup>122</sup> 519 U.S. 452 (1997).

<sup>123</sup> *Auer* at 452.

<sup>124</sup> *Id.*

<sup>125</sup> *Id.* (alterations to original).

excluding reductions in salary for reasons such as disciplinary measures.<sup>126</sup> In a unanimous decision written by Justice Scalia, the 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.<sup>127</sup>

This trend towards deference can be found in other cases. In a different Supreme Court decision, the 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.<sup>128</sup> Notwithstanding, courts do not blindly defer to an agency without carefully reviewing the record to ensure the agency has made a reasoned decision based on the information.<sup>129</sup> The D.C. Circuit has also acknowledged that substantial deference is owed to agencies in interpreting their own regulations. In *Breneman v. FAA*<sup>130</sup>, a structure being built on a hill would extend 62 feet into the airport’s approach surface.<sup>131</sup> The FAA determined the structure to be a hazard based upon an earlier version of the Handbook and the court upheld that determination because the evidence, in the court’s view, was sufficient to support the decision.<sup>132</sup>

Based upon these cases, it seems plausible that the issuance of the Cape Wind No Hazard Determination and the explanations contained within should be sufficient to survive judicial

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<sup>126</sup> *Id.*

<sup>127</sup> Auer at 461.

<sup>128</sup> *Marsh v. Oregon Natural Resources Council*, 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 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 384-385.

<sup>129</sup> *Id.*

<sup>130</sup> 30 Fed. Appx. 7 (D.C. Cir. 2002).

<sup>131</sup> An approach surface is this 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 Jan. 15, 2012).

<sup>132</sup> *Id.* 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.*

review. Just like in *Auer*,<sup>133</sup> the FAA was using an interpretation of its Handbook in order to make a decision about whether Cape Wind was a hazard to air traffic. The FAA was also making a determination about air traffic in the Cape Wind area 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*<sup>134</sup> and *Breneman*<sup>135</sup>. Unfortunately for the FAA, the D.C. Circuit required more of a connection between the determination and every aspect of the Handbook that addresses the definition of a substantially adverse situation. The court's reliance on *D&F Afonso Realty* illustrates this point.<sup>136</sup>

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.<sup>137</sup> The FAA determined the home intruded the “transitional surface”<sup>138</sup> airspace around the airport by 16.1 feet.<sup>139</sup> The FAA conducted an aeronautical study under 14 C.F.R. 77 and determined the house would cause a substantial adverse effect on the airport and inbound flights operating under VFR.<sup>140</sup> The Massachusetts Aeronautics Commission followed the FAA's determination and the town refused to issue an Occupant Certificate for the house.<sup>141</sup> The hazard determination was challenged in the D.C. Circuit, and the court held that the decision to find the house a hazard was arbitrary, capricious, and not in accord with the law.<sup>142</sup> The court reached this conclusion by finding that the FAA did not properly follow its guidelines entitled “Procedures for Handling

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<sup>133</sup> See *supra* notes 122 through 127 and accompanying text.

<sup>134</sup> See *supra* notes 128 through 129 and discussion.

<sup>135</sup> See *supra* notes 130 through 132 and accompanying text.

<sup>136</sup> *Town of Barnstable* at 36.

<sup>137</sup> *D&F Afonso Realty Trust v. Garvey*, 216 F.3d 1191, 1192 (D.C. Cir. 2000).

<sup>138</sup> This transitional surface extends up and out from the runway centerline and from the sides of the primary surface and the approach surface. *Id.*

<sup>139</sup> *Id.* at 1193.

<sup>140</sup> *Id.*

<sup>141</sup> *Id.*

<sup>142</sup> *Id.* at 1195.

Airspace Matters.”<sup>143</sup> Specifically, while the court did find the house violated the transitional surface around the airport, there was no link between the hazard determination and the hazard standard.<sup>144</sup> Moreover, there were other structures like trees which also impeded the transitional surface, yet the FAA failed to take that into account.<sup>145</sup> The court succinctly stated, “[e]ven 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.”<sup>146</sup>

#### V. The FAA Determination on Remand Is Still Deficient Under *Barnstable*

In response to the D.C. Circuit decision in *Barnstable*, the FAA conducted a new hazard determination for the Cape Wind project including a new study and new public comment period.<sup>147</sup> On August 15, 2012, the FAA issued a second Determination of No Hazard for the Cape Wind project.<sup>148</sup> This latest determination attempts to address the holding the D.C. Circuit expressed in *Barnstable* by rewriting how it reached used its own guidelines to determine if a structure will have a substantial adverse impact.<sup>149</sup> The FAA stated in this new Determination that its first step was to determine if a violation of 14 C.F.R. 77 exists.<sup>150</sup> If so, then it must proceed to the second step of evaluating whether there was an adverse effect.<sup>151</sup> If an adverse effect is found, then the structure will be found to be a hazard.<sup>152</sup> In this new Determination, the FAA explicitly clarified that there is no violation of 14 C.F.R. 77 and therefore no hazard to air

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<sup>143</sup> D&F Afonso Realty Trust at 1195. The “Procedures for Handling Airspace Matters” is an older version of the Handbook.

<sup>144</sup> *Id.* at 1196.

<sup>145</sup> *Id.*

<sup>146</sup> *Id.* at 1196-1197.

<sup>147</sup> Study No. 2012-WTE-322-OE.

<sup>148</sup> *Id.*

<sup>149</sup> *Id.* at 3.

<sup>150</sup> *Id.*

<sup>151</sup> *Id.*

<sup>152</sup> *Id.*

navigation.<sup>153</sup> The FAA made this decision because the project is below the 499 foot threshold, and the FAA installed upgraded radar equipment to address the “clutter” issue found in the first determination.<sup>154</sup> Therefore, the FAA claimed there is no need to analyze the project using the Handbook Section 6-3-3, which is one of the sections addressing substantial adverse effects.<sup>155</sup> The FAA also reasserted there is no reason to analyze the issue under 6-3-8(c)(1) because this only applies if both the criteria of 500 feet in height and two miles within a VFR lane exist.<sup>156</sup> While Cape Wind is within two miles of a VFR lane, the wind farm does not exceed the height requirement of 500 feet.<sup>157</sup>

Although 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 will likely be vacated and remanded again by that court.<sup>158</sup> 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.<sup>159</sup> The statutory authority under which the FAA operates requires the study of any structure that could impact the enumerated factors listed in the statute.<sup>160</sup> Moreover, the obstruction standards under 14 C.F.R. 77, which the FAA states are not violated, are only one piece of the puzzle, as there are other regulatory provisions which may be violated.<sup>161</sup> These provisions have become implicated because despite the FAA claiming it need not perform a study, the FAA did in fact gather data on VFR traffic to “respond to the court’s

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<sup>153</sup> Study No. 2012-WTE-322-OE at 3.

<sup>154</sup> *Id.* See also *supra* note 69 and accompanying text.

<sup>155</sup> *Id.*

<sup>156</sup> *Id.* at 6.

<sup>157</sup> *Id.*

<sup>158</sup> *Alliance to Protect Nantucket Sound v. FAA*, Petition for Review, August 22, 2012 (No. 12-1363).

<sup>159</sup> See *supra* note 152 and accompanying text.

<sup>160</sup> See sources cited *supra* note 27 and accompany text.

<sup>161</sup> See 14 C.F.R. § 91.119 which requires a 500 foot distance between objects and aircraft.

concern raised in [*Barnstable*].”<sup>162</sup> As part of this data collection contained in the newest No Hazard Determination, the FAA stated that “some aircraft under VFR may have to alter their altitude or route of flight.”<sup>163</sup> In fact, the study concluded that that for a nine month period between January and September 2011, there were 427 aircraft operating below 949 feet, which would be in violation of 14 C.F.R. 91.119 should the wind farm be in place.<sup>164</sup> The study also stated that fifty two percent of VFR aircraft operations occurred over the southeast corner of the wind farm area.<sup>165</sup>

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.<sup>166</sup> 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.”<sup>167</sup> Despite the FAA’s insistence that Section 6-3-3 is not implicated and that it is again solely relying on 6-3-8(c)(1), it seems unlikely the D.C. Circuit will backtrack and look favorably on this No Hazard Determination. The FAA did not address Handbook Section 6-3-3, and it also failed to discuss 6-3-4 which the Court observed can also cause an adverse impact when more than one aeronautical operation a day would be affected.<sup>168</sup>

The FAA also did not discuss two other Sections of the Handbook which the Court expressly mentioned in its opinion. These are Handbook Section 6-3-5<sup>169</sup> and Section 6-3-8(b),

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<sup>162</sup> Study 2012-WTE-322-OE at 4.

<sup>163</sup> *Id.* at 6.

<sup>164</sup> *Id.* at 7.

<sup>165</sup> *Id.*

<sup>166</sup> *Town of Barnstable*, 659 F.3d at 35.

<sup>167</sup> *Id.*

<sup>168</sup> *Id.* at 34.

<sup>169</sup> *See supra* note 51 and accompanying text.

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.”<sup>170</sup> Considering the data the FAA provided that showed at least one flight per day could be impacted, it seems unlikely the court will agree that the second No Hazard Determination was proper.<sup>171</sup>

## VI. The Need For a Revised FAA Handbook

In *Barnstable, D&F*, and *Breneman*, the core issue the courts ultimately addressed was whether the FAA followed its own guidelines contained in the Handbook for when structural interference exists. The first of these cases, *D&F*, was decided in 2000, so the conflict the Handbook causes is 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<sup>172</sup>, therefore conflicts related to when a structure poses a hazard will become more prevalent.<sup>173</sup>

Some recent scholarship has suggested that the United States should enact comprehensive legislative reforms for siting wind farms.<sup>174</sup> The problem with these worthy solutions is one of pragmatism; Congress lacks the necessary political will and cohesion in order to act on such

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<sup>170</sup> Town of Barnstable at 36.

<sup>171</sup> See *supra* notes 163-164 and accompanying text.

<sup>172</sup> *Offshore Wind Energy Could Power Entire East Coast*, STANFORD UNIVERSITY, (Sept. 14, 2012) <http://news.stanford.edu/news/2012/september/offshore-wind-energy-091412.html>.

<sup>173</sup> *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/>.

<sup>174</sup> See, e.g., 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); 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); Erica Schroeder, *Turning Offshore Wind On*, 98 CAL. L. REV. 1631 (2010) (arguing for Congressionally enacted changes to the Coastal Zone Management Act).

matters. While the topic of wind farms seems mundane to the average observer, the politics surrounding alternative energies is complicated due to government support for companies like Solyndra who have gone bankrupt even after generous tax breaks and government stimulus dollars.<sup>175</sup> With Congress' inability to solve 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.

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 and thus better explanations.<sup>176</sup> However, this fails to recognize the fact that FAA, as with other federal agencies, is facing a greater demand on its services without the corresponding increase in funding; thus, the FAA is doing more with much less.<sup>177</sup> While the FAA's role in siting wind farms is certainly important, it is understandable that the FAA may not be 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.<sup>178</sup>

Because Congress is unlikely to act and the FAA has few resources to tackle this issue, the FAA must find a cheap and independent method of remedying this problem for Cape Wind and future wind farm projects. The only viable solution is for the FAA to modify its own

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<sup>175</sup> Matthew Mosk and 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>. See also *infra* note 179 and accompanying text.

<sup>176</sup> 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, 633-635 (2012).

<sup>177</sup> 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>. 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>.

<sup>178</sup> *What We Do*, FED. AVIATION ADMIN. (March 10, 2005) <http://www.faa.gov/about/mission/activities/>.

Handbook to make it friendlier for the agency to use and the court to interpret. By taking this small step, it will reduce its costs and burdens in the long term for the FAA.<sup>179</sup> Specifically, the FAA should modify Chapter 6 of the Handbook in order to make the procedures for airspace management more streamlined. A proposal would be to turn Sections 6-3-3, 6-3-4, and 6-3-5 into one new Section.<sup>180</sup> 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 makes clear when the provisions of 6-3-3 are supposed to apply. It removes the confusing “and/or” language contained in the current version and it also

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<sup>179</sup> A reader of this comment may be thinking to themselves, “Wouldn’t it be costly and time consuming for the FAA to do this as well?” My response 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.

<sup>180</sup> The current language of Section 6-3-3, 6-3-4, and 6-3-5 is contained *supra* notes 48 through 52 for comparison by the reader.

clarifies the current provisions of 6-3-4 and 6-3-5 by including them in 6-3-3 so as to keep all the substantial adverse effect language under one section. Such a change will make court interpretation easier and improve the efficiency of FAA determinations.<sup>181</sup>

If the FAA Handbook contained the above language, it is possible the determination on Cape Wind would not have been overturned. 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.<sup>182</sup> The only reason the “substantial adverse impact” argument can be used by the opponents of Cape Wind is because the current version of the Handbook does not define substantial adverse impact as needing the pre-requisite 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*<sup>183</sup>, 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 project in the United States.<sup>184</sup> Not only are their political implications from nearby residents and other special interest groups,<sup>185</sup> but a host of regulatory challenges which wind farm

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<sup>181</sup> Although Section 6-3-8(c)(1) is discussed in detail in this note, 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 at 6-3-8(c)(1).

<sup>182</sup> For a discussion on 14 C.F.R. § 77.17 *see supra* note 32.

<sup>183</sup> *See supra* notes 110 through 116 and discussion contained therein.

<sup>184</sup> Not all wind mills face opposition. For example, Atlantic City, NJ hosts five, 380 foot, wind mills directly on the bay and has found that the wind mills have not only increased tourism, but home values with views of the wind mills has 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](http://www.atlanticcityweekly.com/arts-and-entertainment/features/tourism_that_blows-50733287.html).

<sup>185</sup> In addition to concerns noted *supra* at notes 12, 85 and 175 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 to President Barack Obama (August 8, 2012) at 4 *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 suggests the FAA succumbed “to political pressure with suboptimal decisions leading to serious public safety risks.” Letter from Audra Parker to FAA Acting Administrator Michael Huerta (May 22,

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 farms projects are proposed, challenges to their construction will occur more frequently. 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 not to consider those issues, but whether the FAA properly issued its determinations.<sup>186</sup> 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 be successful, thus delaying the project even further. The FAA should learn from this experience and make the changes this comment suggests to its Handbook. Doing so would be prudent, so as to not impede worthy wind farm projects, but also to reduce agency costs as resources become scarcer. Wind farms development is here 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.

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2012) at 12 *available at*

<http://www.saveoursound.org/userfiles/files/APNS%2BLetter%2Bto%2BFAA%2Bre%2BFOIA%2B5%2B22%2B12%5B1%5D.pdf>.

<sup>186</sup> 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.2d at 33.