IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF FLORIDA

Case No. 07-10058-CIV-MOORE/SIMONTON

UNITED STATES OF AMERICA,

Plaintiff,

vs.

STEPHEN ROBERT BARLOW, *in personam*, and the M/V NON-COMPETE, including her motor, apparel, tackle, appurtenances, etc., *in rem*,

Defendants,

FINDINGS OF FACT AND CONCLUSIONS OF LAW

THIS CAUSE came before the Court upon a non-jury trial on October 6-7, 2008. Plaintiff United States of America (the "Government) sued Defendant Stephen Barlow ("Barlow") for damage to a sea grass bed that allegedly occurred when the M/V Non-Compete ran aground in the Florida Keys National Marine Sanctuary. The Government filed a complaint against Barlow and the M/V Non-Compete on July 19, 2007, seeking damages for injury to the sea grass bed pursuant to the National Marine Sanctuaries Act ("NMSA"), 16 U.S.C. § 1443(a)(1). The Complaint alleged \$94,145 in damages arising from the grounding. Compl., at ¶ 16 (dkt # 1). The Government now seeks damages of at least \$507,915.94 for additional damage to the injured area that has occurred since the grounding.

UPON CONSIDERATION of the evidence presented, a site visit conducted on October 2, 2008, the pertinent portions of the record, and being otherwise fully advised in the premises, the Court enters the following findings of fact and conclusions of law.

FINDINGS OF FACT

1. In November of 2003, Barlow was the owner of the M/V Non-Compete, a 1985 model fifty-two foot Hatteras yacht. Trial Tr. at 334-35. Non-Compete weighed approximately 60,000 pounds and was outfitted with twin propellers, each 30 inches in diameter. Id. at 341-42. The space between the propellers, from the center of one propeller to the center of the other, was 66 inches. Id. at 291-92. The vessel had a semi-displacement hull and a draft of five feet, meaning there was five feet from the lowest portion of the propeller to the water line. Id. at 292-93. The draft at the hull was four and one-half feet. Id. at 419. With a wide open throttle, the bow of the vessel would raise slightly, pushing the stern and propellers downward, making the draft of the vessel between five and one-half to six feet. Id. at 293, 349.

2. On November 16, 2003, Barlow was operating the vessel in the Florida Keys National Marine Sanctuary. <u>Id.</u> at 350-51. The vessel was traveling on plane at a speed of 17 to 18 knots when it ran aground, coming to a full stop within a distance of one to two boat lengths. <u>Id.</u> at 349-51. Barlow testified that the grounding occurred between 1:30 and 1:45 p.m. <u>Id.</u> at 386. After the vessel ran aground, Barlow entered the water and circled the vessel at a distance of approximately 30 yards to assess the grounding and water depth. <u>Id.</u> at 353. Barlow testified that he was walking barefoot in sand, that the water was approximately 41 inches or waist deep, and that he did not observe any sea grass in the area. <u>Id.</u> at 352-55. Barlow also testified that the boot topping on Non-Compete, the line painted on the vessel that runs along the waterline, was above the actual waterline by approximately 18 inches. <u>Id.</u> at 355-56. High tide on the afternoon of November 16,

2003, was around 4:00 p.m and was approximately 18 inches above mean lower low water.¹ Id. at 416. At 1:00 p.m., the tide was approximately 12 inches above mean lower low water. Id. The normal tidal range in this area is between 18 and 24 inches. Id. at 245.

3. Barlow called A & B Marina for assistance and provided the coordinates of his location from his Global Positioning System ("GPS"). <u>Id.</u> at 358-58. A & B Marina contacted Florida Keys Harbor Service and within an hour to an hour and fifteen minutes of the grounding, James Felton ("Felton") of Florida Keys Harbor Service arrived. <u>Id.</u> at 360-61. Barlow testified that Felton brought his vessel within shouting distance of Non-Compete, at which time a worker in a skiff approached Non-Compete and attached the towing lines, which took about 15 minutes. <u>Id.</u> at 362-64. With Felton's vessel positioned at ten o'clock with respect to the bow of Non-Compete, Felton pulled the bow of Barlow's vessel approximately 75 degrees to the port side, thereby freeing Non-Compete from its grounding. <u>Id.</u> at 364-66. Felton then towed Non-Compete back to A & B Marina. <u>Id.</u> at 366. The M/V Non-Compete was inspected by a diver at the marina, who reported that there was no damage to the rudder, propellers, paint or bottom of the vessel. <u>Id.</u> at 370.

4. Felton testified in his deposition that he did "not really" have any recollection of the ungrounding of the M/V Non-Compete, but nevertheless testified based on his customary practices. Felton Dep. at 9. Felton reported the grounding and the longitude and latitude coordinates of the grounding, N 24-33.602' and W 081-49.947', to the Florida Fish and Wildlife Conservation Commission ("FWCC"). Pl.'s Ex. 24, FWCC Dispatch Sheet. Felton also recorded

¹ Mean lower low water is the average of the lower low water height of each tidal day observed over the National Tide Datum Epoch. For stations with a shorter series, simultaneous observational comparisons are made with a control tide station in order to derive the equivalent datum of the National Tide Datum Epoch. See <u>http://tidesandcurrents.noaa.gov/mllw.html</u>, last viewed November 24, 2008.

coordinates of N 24-33.6' and W 081-49.9' in a disabled boat information report used for company purposes. Pl.'s Ex. 5, Disabled Boat Information Report. However, it is unknown if the source of these coordinates was from a GPS on Felton's vessel or if the coordinates were obtained from the call for assistance that Barlow made to A & B Marina. Consistent with his testimony that he did not specifically recall the ungrounding of Non-Compete, Felton testified that the general area where the grounding occurred "has a rocky bottom with seaweed," but stated that he did not recall what the bottom was like where the grounding occurred. Felton Dep. at 44.

5. At the time of Non-Compete's grounding, Felton pulled grounded vessels with a tug called the C.O. Jones, which drafted three and one-half to four feet of water, and sometimes used a smaller 26 foot boat as well. <u>Id.</u> at 30, 49, 58. Felton stated that he customarily pulled grounded vessels from "a couple hundred feet away" but that he had pulled grounded vessels in the past from as far as one nautical mile. <u>Id.</u> at 21-22, 57.

6. Felton or one of his employees also marked the location of the grounding by placing a PVC stake at the stern of the M/V Non-Compete. Felton Dep. at 36, 64; Pl.'s Ex. 22. The PVC stake was approximately 10 feet long and was white with the top one and one-half feet painted blue, but bore no identifiable markings that would permit identification of one particular PVC stake from another. Trial Tr. at 311; Felton Dep. at 36, 64; Pl.'s Ex. 22.

7. Felton also took a number of photographs during the recovery process. Pl.'s Exs. 11-15, 21-22. The most relevant of these included (1) a photograph, time stamped 4:16 p.m., of the M/V Non-Compete with a bridle attached and two distant keys in the background; and (2) a photograph, time stamped 5:07 p.m., of a white PVC stake with a blue top placed in the water with Key West in the background. Pl.'s Exs. 11, 15.

8. FWCC Officer David Dipre was assigned to investigate the site where the M/V Non-Compete ran aground. Officer Dipre had no independent recollection of his investigation. Trial Tr. at 304. However, based on his documentation of the investigation, Officer Dipre stated that on November 17, 2003, he proceeded to the GPS coordinates reported by Felton and located a PVC stake in the vicinity, at coordinates N 24.33.612' and W 081.50.164'. Pl.'s Ex. 7; *see* Trial Tr. at 322-33. The coordinates of the PVC marker recorded by Officer Dipre were slightly to the Northeast of the injured area. Trial Tr. at 255-57. Officer Dipre conducted a GPS verification on the morning of this investigation, by which he verified that his GPS readings were accurate to within a few feet. Trial Tr. at 321; Pl.'s Ex. 7.

9. Approximately eight months later, on July 7, 2004, a damage assessment team comprised of Kevin Kirsch ("Kirsch") and Sean Meehan ("Meehan") visited the coordinates provided by Officer Dipre and located a PVC stake, but did not record the coordinates of the stake. Trial Tr. at 118, 122-23; Pl.'s Ex. 7 at 1. Kirsch testified that he located the PVC stake directly within the blowhole. Trial Tr. at 138. The team identified the blowhole at N 024.33.6607 W 081.50.1726, the beginning of the port propscar at N 024.33.6018 W 081.50.1668, and the outbound injury at N 024.33.6087 W 081.50.1649. Pl.'s Ex. 7 at 1. Kirsch testified that the coordinates reported for the blowhole were inaccurate due to a transcription error, and that the actual blowhole coordinates were N 024.33.6007 W 081.50.1726. Trial Tr. at 129. Kirsch did not recall the time of day that the assessment was conducted, but testified that it was his standard practice to conduct an assessment at slack water.² Id. at 141. On July 7, 2004, there was a low slack water very early in the morning and a high slack water in the middle of the day. Id. Kirsch

² Slack water is the period during which no appreciable tidal current flows in a body of water.

testified that it was most likely that his measurements were taken at high tide. Id. at 148.

10. The damage assessment team mapped the perimeter of the injured area and bathymetry³ across the site. <u>Id.</u> at 123. The team mapped the area using a Trimble Pathfinder Pro XL, a differential GPS unit with an error rate of approximately 12 to 20 inches. <u>Id.</u> at 123. The team documented a "blowhole," or injured area, and a pair of propeller scars in a southwesterly inbound direction and an outbound injury to the east. Pl.'s Ex. 9 at 5. The port propeller scar was 7.8 meters long. <u>Id.</u> at 4. The starboard propeller scar was 5.97 meters long. <u>Id.</u> at 4. The width of the propscars averaged 12.5 inches and do not appear to increase or decrease significantly in width. <u>Id.</u> at 4-5. The width from the center of one propscar to the center of the other was 67 inches. Trial Tr. at 298.

11. On December 21, 2007, another assessment team, comprised of Shelli Braynard ("Braynard"), Lonny Anderson ("Anderson"), and Hatsue Bailey ("Bailey") reassessed the injured area first surveyed by Kirsch and Meehan. Pl.'s Ex. 20 at 1. The team mapped the perimeter of the injured area and bathymetry across the site. They found that since the initial assessment, the injured area had expanded in a northeasterly direction by 309.24 square meters and that 166.27 cubic meters of additional sediment had been removed from the area. Id. at 4. The bathymetry was conducted at approximately 1:30 p.m. Id. at 9. At that time, the height of the tide was approximately nine inches above mean lower low water. Trial Tr. at 412.

CONCLUSIONS OF LAW

1. This Court has admiralty jurisdiction over this cause under 28 U.S.C. § 1333 and

³ Bathymetry measures the depth of a body of water. Here, the bathymetry assessment allowed the team to associate a depth reading with a longitude and latitude coordinate. This data was later used to create a bathymetry model of the injured area. Trial Tr. at 127.

pursuant to Rule 9(h) of the Federal Rules of Civil Procedure and Supplemental Rules governing admiralty and maritime claims. The Court also has jurisdiction over claims brought under section 312(c) of the NMSA, 16 U.S.C. § 1443, pursuant to 28 U.S.C. §§ 1331 and 1345.

2. The Government bears the burden of proving, by a preponderance of the evidence, that the damage to the sanctuary resources for which recovery is sought was caused by the grounding of the M/V Non-Compete. Accordingly, Defendant bears no burden of proving that the M/V Non-Compete's grounding occurred at an alternate site.

3. The only dispositive factual issue concerning liability before this Court is whether the injured area for which the Government seeks damages was caused by the grounding of the M/V Non-Compete.

4. A number of factors militate in favor of a finding that the damage to the injured area at issue was caused by Non-Compete's grounding. The location of Non-Compete's grounding was marked with a white PVC stake with a blue top, the type of marker typically used to identify the location of a grounding. Officer Dipre found a similar or identical marker the next day in the vicinity of Non-Compete's grounding. Although the PVC stake was found at some distance from the coordinates that Felton provided to FWCC, the source of those coordinates are unknown and can therefore only serve as a point of reference indicative of the vicinity of the grounding. It is nevertheless significant that Officer Dipre did not testify that he found any other similar PVC marker in the area, where such a marker would be readily visible from a distance in open water. Nor is there any reason to believe that Officer Dipre or any other person moved the PVC marker between the time of the grounding and the time Officer Dipre completed his investigation the next day.

5. While there is necessarily less certainty that the PVC marker was not moved between the time of Officer Dipre's investigation in November of 2003 and the first assessment in July of

2004, all relevant testimony indicated that the marker was found either within the blowhole or in the immediate vicinity of the blowhole. Kirsch testified that he located the PVC marker directly inside the blowhole. The coordinates of the PVC marker recorded by Officer Dipre do not place the marker directly within the injured area, but rather slightly to the Northeast and outside of the expanded injured area. Given the reliability of Officer Dipre's GPS, as documented in his GPS verification form, there is some inconsistency between Officer Dipre's testimony and Kirsch's testimony concerning the location of the PVC stake. Nevertheless, even if the the PVC marker was not inside the injured area, it is not incomprehensible, or even unlikely, that the marker could have originally been placed at some distance from the stern of the M/V Non-Compete. This would be consistent with Officer Dipre's coordinates for the PVC marker, which are still in the immediate vicinity of the propscars and blowhole.

6. It is also significant that the distance from the center of each propeller scar to the other matched the distance between the center of each of Non-Compete's propellers to within one inch. While the Trimble GPS used to map the propscars is only accurate to approximately 12 to 20 inches, the propscar measurements are still reliable. Although the longitude and latitude coordinates of a given data point may only be accurate within 12 to 20 inches, the data points are nevertheless accurate with respect to one another. This is evidenced by the fact that when the data points making up the propscars were mapped, they formed straight lines and right angles that clearly demarcated two propscars between five and eight meters long. In other words, while the coordinates of each point mapped along the propscars may have been in error by up to 20 inches, any potential error of the mapped points varied in the same direction and by the same distance as every other point. Otherwise, the resulting map would have been a series of random points within a range of 12 to 20 inches along two parallel axes. Therefore, the shape of the propscars as mapped is reliable. The width of each propscar is reliable because Meehan measured the distance

by hand using a fiberglass tape measure. Trial Tr. at 204-05.

7. The 2004 assessment team and the 2007 assessment team both produced bathymetry reports of the injured area. The teams used a fathometer to measure water depth, which was correlated to specific coordinates registered by the Trimble GPS. Id. at 146. One component of the fathometer was the transducer, which sent a signal to the sea floor to ascertain the depth. Id. The transducer was positioned approximately six inches below the water level. Id. Thus, the fathometer's water depth reading was actually six inches less than the actual water depth and no adjustments to the final bathymetry reports were made to correct this. Id. at 146, 243. Kirsch testified that according to the bathymetry report in the 2004 assessment, the water depth at the perimeter of the injured area was between .2 and .4 meters (7.9 to 15.75 inches). Id. at 147. According to the bathymetry report, the majority of the depth at the perimeter of the blowhole appears to range between .3 and .6 meters (11.8 to 23.6 inches). Pl.'s Ex. 9 at 6. The area where the propscars are located is between .3 to .6 meters (11.8 to 23.6 inches) in depth, although there is no depth reading where the port propscar begins. Id. Once the six inch adjustment is made to compensate for the depth of the transducer, the depth at the perimeter ranges from 13.9 to 29.6 inches, and the depth at the propscars ranges from 17.8 inches to 29.6 inches. Id. These depth readings were most likely taken at high tide. Trial Tr. at 148.

8. By the time the 2007 assessment was conducted, the propscars were no longer visible due to the expansion of the blowhole. Pl.'s Ex. 20 at 9. Braynard testified that the water depth at the perimeter of the blowhole in 2007 was approximately .4 to .5 meters (15.75 to 19.7 inches). Factoring in the depth of the transducer, the depth was between 21.75 and 25.7 inches. At 1:30 p.m. on December 21, 2007, the tide was approximately 9 inches above mean lower low water.

9. In order for the M/V Non-Compete to have caused the damage within the injured area, Non-Compete must have created the propscars. The average width from the center of one propscar

to the center of the other was 67 inches. Trial Tr. at 298. This closely matches the 66 inches from the center of one of Non-Compete's propellers to the other. The port propeller scar was 7.8 meters (25.6 feet) long. The starboard propeller scar was 5.97 meters (19.6 feet) long. Pl.'s Ex. 9 at 4. The width of the propscars averaged 12.5 inches and do not appear to increase or decrease significantly in width. Id. at 4-5. In order for Non-Compete's 30 inch propellers to have created propscars of approximately 12 inches in width, only a maximum of 1.25 inches, or in other words approximately four percent of the total diameter of the propellers, could have penetrated the sea grass bed.⁴

10. This presents the question of whether it would have been possible for the M/V Non-Compete to leave the propscars that Kirsch and Meehan mapped at the injured area. Dr. Kenworthy testified that when a vessel runs aground in a sea grass bed the propellers "shear off the leaves of the seagrass" and that "when the water gets shallow enough, [the propellers] actually dredge up the sediment, just like a dredge would dredge a channel." Trial Tr. at 26. The 2004 bathymetry report indicated a depth at the precise location of the propscars of up to approximately 30 inches, and a depth at the perimeter of the blowhole of approximately up to 30 inches. Kirsch testified that these readings were likely taken at high tide. Barlow testified that the water level in the general area was around 41 inches. At 1:00 p.m. on the day the grounding occurred, the tide

⁴ To determine how much of a rotating 30 inch propeller must penetrate a surface to create a displacement approximately 12 inches wide, the Pythagorean Theorem $(a^2 + b^2 = c^2)$ may be used. A horizontal line may be drawn across the propeller at the point where the width of the propeller reaches 12 inches. This line is then bisected by a perpendicular vertical line running from the center of the propeller to its base. The intersection of these two lines now forms the right angle of two adjacent and opposite scalene right angled triangles. The hypotenuse of each triangle is then created by drawing a line from the center of the propeller to each end of the horizontal 12 inch line.

The hypotenuse of each triangle is 15 inches because it equals the radius of the circle. The base of each triangle is 6 inches, because each base is half of the 12 inch horizontal line. The length of the remaining side is $6^2 + b^2 = 15^2$ or $36 + b^2 = 225$. Thus, $b^2 = 189$, the square root of which is approximately 13.75. Therefore, the distance between the horizontal 12 inch line and the center of the propeller is 13.75 inches, and the distance between the horizontal 12 inch line and the base of the propeller is 1.25 inches. The sum of both equals 15 inches, or the radius of the circle. Accordingly, at a height of 1.25 inches from the base of the propeller, the propeller reaches a width of 12 inches.

was approximately 12 inches above mean lower low water. Braynard testified that the depth at the perimeter of the blowhole in 2007 was approximately up to 20 inches at a time of day when the tide was nine inches above mean lower low water. The consistency of this evidence concerning water depth at the injured area supports Kirsch and Meehan's bathymetry assessment in 2004, which identified water depth at the location of the propscars of up to approximately 30 inches.

11. Barlow testified that when he ran aground he was traveling at a speed of 17 to 18 knots. At this speed the vessel would have been on plane with a draft of 66 to 72 inches at the propellers. The hull would have had a draft of less than 54 inches. This raises the question of how a vessel, the lowest point of which is between 66 and 72 inches below the waterline, could make its first contact with the sea floor in water only 30 inches deep? Even assuming, contrary to the evidence, that Kirsch's bathymetry assessment was actually conducted at low tide, and taking into account a tidal range in the area of up to 24 inches, the depth of the water at the propscars could have only reached a maximum of 54 inches in depth. Further assuming, again contrary to the evidence, that Non-Compete was not on plane, the vessel would still have a draft of 60 inches. Even applying these counterfactuals, it is unclear how a vessel with a draft of at least 60 inches could make its first contact with the sea floor in 54 inches of water.

12. If a vessel weighing 60,000 pounds and traveling at a speed of 17-18 knots were to run sufficiently hard aground upon a thick mat of Thalassia sea grass so as to cause the boat to come to rest in less than two boat lengths, one would expect the spinning propellers to penetrate the sea grass bed by more than 1.25 inches. *See* Trial Tr. at 53. Given that the propellers are the portion of the vessel farthest below the surface of the water, the weight of the vessel upon impact would be resting entirely on the propellers, at least until the drag created by the propellers impacting the sea floor forced the hull downward until making contact with the sea bottom.

13. There are at least two scenarios in which 30 inch propellers might only penetrate 1.25

inches into a sea grass bed in a manner that would leave a propscar of just over 12 inches in width and 25 feet in length. First, the depth of the water would need to be adequate to keep the vessel sufficiently afloat such that the propellers only begin to impact the sea floor, thereby limiting the depth that propellers penetrate the sea grass and underlying substrate. However, if a vessel has a draft of 60 to 72 inches, the amount of water beneath the vessel would need to be at least 58 inches to limit the penetration of the propellers into the sea grass bed to less than two inches. No evidence has been presented to support a water depth of 58 inches at the location of the propscars. Moreover, to create uniform propscars under such circumstances, the sea bottom would have to be completely flat across the 5 to 8 meter length of the propscars. Otherwise, the width of the propscars would vary considerably, given that a one inch increase in the depth of penetration beyond 1.25 inches would increase the width of the propscar by 3.8 inches. However, the 2004 bathymetry report demonstrates that the depth across the length of the propscars varies by .3 meters (11.8 inches), yet the width of each propscars is virtually uniform from one end to the other. Pl.'s Ex. 9 at 6.

14. Second, a propscar approximately 12 inches wide would be consistent with a 30 inch propeller's impact with the sea floor where the sea grass bed is only 1.25 inches thick and the underlying substrate is so hard that the propeller is unable to penetrate it. The hard substrate would prevent the propeller from penetrating it and would limit the damage to the sea grass to the width of the propeller at the maximum depth of the sea grass bed. However, this scenario is inconsistent with the evidence presented. First, the sea grass bed at the injured area, as depicted in the video of the first injury assessment, appears to be significantly deeper than 1.25 inches. Pl.'s Ex. 30. Second, the substrate below the sea grass bed does not appear to have been sufficiently hard to deflect Non-Compete's spinning propellers while the vessel was in motion. Dr. Kenworthy testified that when a vessel attempts to power off after becoming grounded, "the stern of the vessel

will actually squat down, and as the propellers are spinning and displacing sediment, the stern of the vessel may actually go deeper and deeper and the hole will get a little bit deeper." Trial Tr. at 27. Dr. Kenworthy's testimony is consistent with the 2004 bathymetry assessment, which depicts the blowhole where the stern of a vessel would have been located to be almost twice as deep as the perimeter. Dr. Baca testified that the sea floor in the vicinity was not soft, and was made up of "gravel, some shell hash and rock." <u>Id.</u> at 429. Nevertheless, the fact that a vessel at rest in the center of the blowhole was able to displace enough sediment to double the depth of the blowhole around the stern of the vessel indicates that while hard, the sea bottom was not so firm that it could have deflected a spinning propeller being forced downward under the weight of a moving 30 ton vessel. Morover, Dr. Baca testified that a vessel running aground on a hard surface would be likely to sustain tuliping or bending of the propeller blades, and damage to the rudder, paint, and possibly the engine. <u>Id.</u> at 429-40. However, a scuba diver confirmed that Non-Compete was not damaged when it ran aground. Plaintiff has provided no other explanation, and this Court is unable to ascertain, how under these circumstances a 30 inch propeller could have created propscars 12.5 inches wide.

15. Plaintiff contends that the photograph marked Plaintiff's Exhibit 11, depicting Non-Compete with a bridle attached to the bow, and with Mullet and Cottrell Keys in the distant background, is probative evidence that the injured area was in fact the location where Non-Compete ran aground. Plaintiff's argument is based on the notion that it is evident from the picture that the photograph could only have been taken from the precise location of the injured area, and that Non-Compete is clearly aground in the photo. This Court find that the photograph is not significantly probative because it is difficult, if not impossible, to accurately utilize the keys in the background as points of reference in an attempt to identify the precise location where the

only the naked eye, the precise distance between the keys and the location where photograph was taken. Without an accurate measure of distance, there is a significant area along and between the lines of sight to either key where Mullet and Cottrell Keys would look virtually identical in the background of a similar photograph. Moreover, Mullet and Cottrell Keys are at such a distance that a photographer would have to move a significant distance to the left or right to noticeably change the perspective of the keys. Much like the moon, distant objects do not effectively serve as fixed points of reference from which to calculate one's own position, absent the precise location of the distant objects and the ability to identify the direction to the distant objects in degrees or minutes. While the location of Mullet and Cottrell Keys are known, Plaintiff provided this Court with no means to ascertain the direction to either key from the view depicted in the photograph, such that the intersection of a reverse azimuth from both keys would accurately identify the location where the photograph was taken. Even if such a method were possible, it is not clear from the photograph that Non-Compete is aground in the photo, making the exercise of identifying the location where the photograph was taken futile.

16. There are a number of unresolved inconsistencies in the accounts of the grounding and ungrounding of the M/V Non-Compete, including the exact time of the grounding, the events that occurred during the ungrounding, the time of the ungrounding, and the duration of the entire ungrounding operation. However, these inconsistencies are of limited significance here because, while they are relevant to credibility assessments, credibility has no bearing on the physical evidence associated with the injured area.

17. The Government has the burden of proving, by a preponderance of the evidence, that the M/V Non-Compete ran aground at the injured area for which the Government seeks damages. The Government presented a compelling case that Non-Compete ran aground at the injured area by presenting evidence that Felton marked the injured area with a PVC marker, that Officer Dipre

found the PVC marker the next day, and that the 2004 assessment team located the same PVC marker. However, the propeller scars mapped at the injured area were demonstrably inconsistent with a propeller scar that would have been created by Non-Compete under those circumstances. The Government's attempts to reconcile this dilemma were unpersuasive. Even when taking the physical evidence in the light most favorable to the Government, the Government has provided no plausible explanation for how the M/V Non-Compete could have navigated to a grounding in water significantly more shallow than its draft, leaving propeller scars substantially narrower than the diameter of Non-Compete's propellers.

18. Upon the evidence presented, although the chronology of events favors the Government, Plaintiff has failed to reconcile dispositive and uncontroverted physical evidence with its theory of the case. This Court finds that the propeller scars mapped by Kirsch and Meehan are inconsistent with propeller scars that the M/V Non-Compete could have created under those circumstances. Therefore, despite other evidence supporting Plaintiff's case, the Government's failure to adequately demonstrate that the M/V Non-Compete could have left the propeller scars identified at the injured area is fatal to their case.

IV. CONCLUSION

Based on the foregoing, it is

ORDERED AND ADJUDGED that judgment is hereby entered in favor of Defendant Stephen Barlow and the M/V Non-Compete. This case is DISMISSED WITH PREJUDICE. The Clerk of the Court is instructed to CLOSE this case. All pending motions are DENIED AS MOOT. DONE AND ORDERED in Chambers at Miami, Florida, this **Sh** day of December, 2008

EL MOORE

UNITED STATES DISTRICT JUDGE

All counsel of record cc: