UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * * * * * * * * * * * * * * * *
Investigation of: *
                                     *
CAPSIZING AND SINKING OF THE   *
F/V *SCANDIES ROSE* NEAR SUTWIK   * Accident No.: DCA20FM009
ISLAND, ALASKA, DECEMBER 31, 2019   *
                                     *
* * * * * * * * * * * * * * * * * * *

Interview of: KORINA KARAMALAKI, Marketing Manager
               Windy.com

                        Via Microsoft Teams

                        Wednesday,
                        July 29, 2020

APPEARANCES:

BART BARNUM, Marine Accident Investigator
National Transportation Safety Board

PAUL SUFFERN, Meteorologist
National Transportation Safety Board

███   ███   Member
    C███uard Marine Board of Investigations

███ ███ Legal Advisor
    o███uard Marine Board of Investigations

███ ███████ Member
    a███arine Board of Investigations

MIKE BARCOTT, Attorney
Holmes, Weddle & Barcott
(On behalf of the *Scandies Rose*)

DAVID BARCOTT, Attorney
Holmes, Weddle & Barcott
(On behalf of the *Scandies Rose*)

NOELLE RUNYAN, Deputy Chief of Environmental and
    Scientific Services
National Weather Service

<u>I N T E R V I E W</u>

(12:32 p.m.)

MR. BARNUM: All right. Without further ado, this is Bart Barnum with the NTSB. It's 12:32 Eastern Time here in the States. We're conducting an interview of Ms. Korina Karamalaki from Windy.com. She is the subject matter expert with Windy. This interview is in conjunction with the *Scandies Rose* accident, a sinking that occurred New Year's Eve 2019 at approximately 2200.

I'm going to go around the room. So, first, Ms. Karamalaki, could you please state your name?

MS. KARAMALAKI: All right. So nice to meet you all. And my name is Korina Karamalaki from Windy.com, and I'm in charge of marketing in Windy. So --

MR. BARNUM: And other NTSB on the line?

MR. SUFFERN: Good morning or good afternoon everyone. My name is Paul Suffern, meteorologist with the NTSB.

MR. BARNUM: And U.S. Coast Guard?

CDR ████ Good morning. My name is ████ ████. I'm a team member on the Coast Guard Marine Board of Investigations.

LCDR ███████ Good morning. My name is LCDR ██████ ██████ also a member of the Coast Guard Marine Board of Investigations.

LT ████ Good morning. This is LT ████ ████ and I am the legal adviser to the Coast Guard Marine Board of Investigations.

MR. BARNUM: Okay. And the attorneys representing the

1   owners?

2   MR. M. BARCOTT: Good morning. This is Mike Barcott,

3   representing the owners of the *Scandies Rose.*

4   MR. D. BARCOTT: And Daniel Barcott, another attorney

5   representing owners of the *Scandies Rose.*

6   MR. BARNUM: Okay. Attorneys representing the two survivors?

7   (No audible response.)

8   MR. BARNUM: Okay. How about National Weather Service?

9   MS. RUNYAN: Hello. I'm Noelle Runyan. I am the deputy

10 chief of the environmental and scientific services division,

11 Alaska region headquarters.

12   MR. BARNUM: Thank you, Noelle. Anyone else on the line

13 please?

14   (No audible response.)

15   MR. BARNUM: Okay, great. That will do it. So,

16 Ms. Karamalaki, I'm going to turn it over to Mr. Suffern. He's

17 our resident meteorologist for the NTSB for the first line of

18 questioning. Thank you. Paul?

19   MR. SUFFERN: Hi. Good evening, Korina. I hope you're

20 having a good evening over there and I really appreciate your time

21 today.

22   MS. KARAMALAKI: Thank you.

23   MR. SUFFERN: Let's start off with a few kind of background

24 questions.

25

1	INTERVIEW OF KORINA KARAMALAKI
2	BY MR. SUFFERN:
3	Q. How long have you been at Windy.com?
4	A. Well, I've been with Windy over, I think 8 months right now.
5	Q. Okay, great.
6	A. So --
7	Q. And you said you were the marketing manager?
8	A. Yeah, exactly. So I'm in charge of marketing communication.
9	We have a marketing department in Windy, and we are in touch with
10	the -- with everyone. So --
11	Q. Okay. If you could, could you kind of give us a high level
12	overview of Windy.com?
13	A. Of course. So I'm not sure how familiar you are with Windy,
14	but Windy started in 2014. It was kind of like the pet project of
15	her owner, Ivo. And because he's a big kiter and really into
16	wind-based sports, he wanted to create some application which
17	would really give him appropriate information about weather, wind.
18	So we started first with the wind visualization, and then of
19	course we broadened of -- our scope of services. And so with the
20	application, was evolving over the years. Now we are 5 years old,
21	and we have tons of layers and functionalities. So it was a long
22	journey, but we are always evolving, and we want to broaden our
23	services even more, so that's what we are working on right now.
24	So if you have any --
25	Q. Okay.

1 A.   -- like, more detailed questions, it would be appreciated.

2 Well, it's your turn.

3 Q.   Well, absolutely. And do you have both -- does Windy.com

4 have both an application on the computer as well as on a tablet or

5 electronic --

6 A.   Exactly. So at first, we were only with base application.

7 But shortly after, we released an iOS app and Android, and also we

8 are available on tablets because it's the same platform. So we

9 are available on all other devices that I can say.

10 Q.   Okay. And who's -- who is the target audience that you all

11 have at Windy.com?

12 A.   Well, initially I think it was more of the extreme sport

13 audience, but now we are slowly -- well, we are already moved to

14 more, like, a regular user who is interested in weather. So the

15 scope of users is really wide I think. It's from sportsmen to

16 regular user to some weather enthusiasts and meteorologists,

17 because we are used both by the professionals and also by the

18 regular users.

19   So it's kind of both parties, and there is maybe some

20 correlation between, you know, professional and regular user. But

21 at first we started as a professional app. We are still a

22 professional app, but we also want to acquire more regular users,

23 which we are succeeding at.

24 Q.   Okay. And do you have any -- I don't know if your website or

25 your app is able to gather background data, but do -- are -- do

1 you have any sense of, you know, 30 percent are professionals and

2 70 percent are regular users? Or do you have any numbers behind

3 those?

4 A.   Well, I can't say about numbers, but maybe some geographic

5 location, I can tell you that our -- most of the users are from

6 U.S., and the rest of -- rest is the rest of the world. But -- so

7 I can say that a lot of our users are from the U.S., which are our

8 main audience, I would say.

9 Q.   Okay, great. And as far as -- I'm on Windy.com right now,

10 and I'm just kind of overlaying layers and all of the different

11 functionality that you have on the website. If a professional

12 person was using things like that, could they set preferences so

13 that when they load Windy.com either on their computer or on their

14 phones, that -- say they have the snow depth layer on. If they

15 set that as their preference, would that come up as the first

16 thing that they see the next time they'd load the website?

17 A.   Well, this option is not available. You can -- well, the

18 default layers always went, because initially we are wind-based

19 application, so that's stayed with us until now. So this cannot

20 be modified, but what can be modified is actually in the menu, if

21 you are on the desktop, then you can open the left side menu, and

22 there is a menu with favorites and settings. So in settings, it's

23 possible to set the units you are really interested in.

24   So if you are -- if you want to see wind in MPH or KT or KM,

25 this can be modified. Also the time format, your position, your

1 default position can be modified. Time -- so the basic units can

2 be modified. Also, you can add your favorites and create some

3 places you would like to have a quick access to.

4   And also, you can -- if it's on the desktop, you can choose

5 the layers you would like to have as a quick access as well. So

6 on the right side, there is a little menu, and a little extendable

7 menu. If you click on more layers, then you can choose the layers

8 you would like to have if you open Windy. So you can click on

9 them, not just find them in the list below.

10   Also, there is one interesting overlay. It's our

11 point-of-interest layers. You can find, for example, webcams,

12 airports, our really big platform with weather stations, and also

13 other layers like tide forecast and active fires. So there is a

14 lot to really explore there.

15   When it comes to default model, forecast model, it's always

16 ECMWF, and it's both for like maybe -- it goes all the platforms,

17 so desktop, mobile phone, or tablet, it's always ECMWF. Of course

18 you can change when you interact with Windy, but it also can't be

19 modified. Not right now. Maybe in the future.

20 Q. Okay. That was very helpful. Thank you. What other -- are

21 there other weather models that are going in besides the European

22 model weather? What other weather model options are there?

23 A. Of course. So for example, when it comes to Europe -- well,

24 the global models, I'll start with global models. It's ECMWF,

25 GFS. So these are the global models. Then in Europe, we have

1 ICON, AROME, so these are the European models. Or in U.S., you

2 can find models as NAM. So this is when it comes to weather.

3   So when it comes to waves and stuff like that, we have

4 different models to choose from. So for you guys, I think the

5 main models would be ECMWF and GFS for weather -- basic weather.

6 And then if you are interested in waves, there is ECMWF WAM and

7 also WAVEWATCH III. So this is for the U.S. for example. So it

8 depends on the location of course, because we have local models

9 for Europe and -- but for U.S., we have those two models and plus

10 two more when it comes to other parameters like that.

11 Q.   Okay. And when a new -- how does Windy decide when a new

12 data source or weather model is able to go into Windy.com?

13 A.   Well, it's -- I think right now, it's up to the management,

14 and also from our users' feedback. But mainly, it's up to us what

15 we decide is the best way to go. For example, for us, ECMWF was

16 the way to go because it's really high professional -- well,

17 really high quality like, model with the precise data. So this

18 was the way to go for us at first. This is why it's also our base

19 model -- our typical model for Windy.

20   And future models really depends what we find is -- there is

21 a demand for that, and what we find is -- would be beneficial for

22 Windy and for our users. So I can't really say which model would

23 be the next, but we are doing our research which one would be sort

24 of the one.

25 Q.   Okay. That makes sense there. Now, as far as users

1   providing feedback, say -- how many -- how -- first of all, how do

2   users provide feedback to Windy?

3   A.   Well, there is different ways. For example, in the

4   beginnings and also for right now, we have our Windy Community.

5   This is a place where we announce new features, new platforms for

6   Windy, and new tools. So it's kind of like a combination of PR

7   for us. It will help to communicate to users, and also it is a

8   place where the users can communicate with us and interact with

9   other users to find questions. You can also find a lot of

10 tutorials on Windy Community, and we also regularly reply to

11 really many questions from our users.

12   So this is platform where we communicate with them, we

13 went -- where we announce new features and some big news, and this

14 is also the place to go if a user is not really familiar with

15 Windy but wants to learn more about it and wants to find other

16 really avid users of Windy and discuss. And also like,

17 suggestions and questions and stuff like that. So this is usually

18 what the Community is for.

19   So -- this is informational, and then also we have feedbacks

20 on Google, on iOS, and other platforms. So those are all the

21 places where we get our feedback, and also some type of

22 communication where users decide to send us emails or other stuff

23 like that. So yeah, I would say those are the three main channels

24 which we use to communicate and get our feedback.

25 Q.   Okay. And how many users per day do you -- does Windy.com

1 have, if you know those numbers?

2 A.   Recently I think it slightly changed. I think it's around 1

3 million per day -- 1 million users per day.

4 Q.   Okay. And if -- can you describe with me, maybe over the

5 last 8 months since you've been there, a time where the user

6 community, maybe -- I don't know how many it takes, maybe 100

7 users or 1,000 users said, hey, we would really like this button

8 or this color on the Windy.com? How does that go?

9 A.   Well, I really think over the 8 months, I don't think it

10 really works like that, that there is like, 1,000 users who really

11 wants the same thing. It's -- I think it's more like an ongoing

12 thing that people keep to ask for it, and they -- maybe I can say

13 one example that -- we have route planning on Windy. Initially it

14 was only that you could set your waypoints and check the weather

15 on your route. But people really wanted to add a speed factor so

16 they can add -- okay, I will be going, I don't know, 100

17 kilometers per hour, and I want to see if I reach this waypoint,

18 what will be the weather. So this is what people really keep --

19 kept asking about. And we been considering it for a long time,

20 but finally we implemented it.

21   So it's -- I would say more like an ongoing thing. So if

22 like -- okay, one -- you know, some people ask what days are we

23 going to do this? It's more like a long -- longer time planning.

24 Of course we can react quicker, but this is what we choose to

25 really proceed. So we get our feedback, and when it reach some

1 point, we decide okay, this is what will really benefit for Windy,

2 and we can prioritize it. So it's -- yeah, I would say it's about

3 prioritizing as well for us.

4 Q.   Great. Thank you. Thank you for the example. That really

5 helps. Now, turning to the Weather Warnings layer that Windy.com

6 has, can you kind of describe that layer and maybe how the levels

7 of moderate, severe, and extreme are determined?

8 A.   Of course. So this layer shows you -- it's based on CAP

9 alerts from weather agencies -- from national weather agencies

10 with each country. So if you open Weather Warnings, you can see

11 like, a gray map with color for parts of it. So basically what

12 you see at first, you see the levels moderate, severe, and

13 extreme. So maybe take a look at Europe. So there is -- it's

14 only -- and if you click on Italy, a little menu will be expanded.

15 And you can see that there is warnings -- a high temperature

16 warning.

17   So this is actually the info we gather from weather agencies

18 in form of CAP alerts. The update times are usually about 30

19 minutes, but to be on the safe side, it's about zero to one hour.

20 So within one hour, if an agency issues a new alert, it will be on

21 display on Windy. Also you can -- there is a little switch on the

22 bottom and -- colorized by type of danger. So you can actually

23 also view the CAP alerts in different form of colors. So for

24 example, if there is a CAP alert for a fire, then it would be in

25 the color of red. So if you actually turn on this little button,

1　it will be shown in a different perspective.

2　　　When it comes to U.S., I think we are pretty much covered.

3　Every state should be covered, and every possible new alert should

4　be projected on Windy. So right now we can see that there is a

5　few CAP alerts across the U.S. Maybe if you have some more

6　detailed question regarding the CAP alerts would be -- so I can

7　answer it more thoroughly.

8　Q.　Yeah. No, that's very helpful. So as far -- it was -- the

9　reason that Windy.com decided to go with the CAP alerts, is that

10　just the easiest way? Because, you know, there are 200 countries

11　around the world, so how are you going to gather data from all of

12　these sources, and the CAP was kind of the easiest?

13　A.　Well, we decided because it's -- I don't think it's the

14　easiest, but it's the more -- most standardized way of

15　communication when it comes to Weather Warnings. Because it has

16　some standards and some rules each country has to follow to issue

17　a CAP alert. And it has a standardized format.

18　　　So to us, it's quite convenient, and maybe also easier to

19　project it on Windy, because it has certain rules which are

20　normally within the CAP alert. So for example, it's really

21　standardized because you have pretty elaborate -- it's moderate,

22　severe, and extreme, so we can easily determine that for each

23　country. So I would say it's the -- it's not the easiest, but

24　it's convenient for us and for the users, because it's something

25　they already know, and they can take a look at predictions when

1 it's issued.

2 Q.   Okay. And so as far as what color or which, I guess, slot or

3 category that Windy.com puts it in, whether it puts the CAP alert

4 into moderate, severe, or extreme, is that determined by Windy?

5 Or are there different levels in CAP?

6   Because for example, right now I'm looking at Washington

7 state, and they have a warning for heat. And it's a warning for

8 heat, and then I go to the Gulf of Alaska right now, southwest of

9 Kodiak, and they have a warning for wind. But the gale warning is

10 colored yellow as moderate while the heat warning is colored

11 orange as extreme. Both of the statements have the word warning

12 in there, but the -- one of them is orange, and one of them is

13 yellow. Is that determined by CAP or determined by Windy?

14 A.   Well, the levels, moderate, severe, and extreme, is

15 determined by CAP alert. So the CAP alert already contains the

16 label, whether it's severe, or extreme, or moderate, it's already

17 in it. And then the colors, it's -- they are chosen by Windy. So

18 yeah, it's chosen by Windy, so there is no like, standard for

19 colors for CAP alerts.

20   But if you -- like I said, if you chose the option to

21 colorize by type of danger, than you can clearly see what kind of

22 danger the CAP alert -- that CAP alert represents, whether it's

23 rain, thunderstorm, flood, fire, high temperature, and so on. So

24 you can actually -- it's -- before that, you can -- okay, you can

25 see, is this severe or extreme? And if you choose this option,

1 you can get more details and select the type of danger.

2 Q.   Okay. And so if a country, the United States, Canada,

3 France, changed I guess the format of their warning and changed it

4 on the CAP alert, then that would change it when it came to

5 Windy.com?

6 A.   Exactly. It should be in a matter of minutes. I think the

7 upwards submit time would be a half an hour maximum. If the

8 agency change it, and when it comes back to Windy, and when we

9 display it, it's about a half an hour.

10 Q.   Okay. And so just to -- I guess to use the United States as

11 an example as well, so when the -- so if you use the Gulf of

12 Alaska here, and they have a gale warning, it would be something

13 for the United States to change on the CAP system for that gale

14 warning to show up as severe or extreme rather than moderate? It

15 would be something in our computer system here over at the United

16 States, we would have to change for that to show up as a different

17 color, right?

18 A.   Yeah, that's right. You would have to change it on your side

19 to be projected on Windy. Because we don't modify the CAP alerts.

20 The agency would have to do that, if I understood --

21 Q.   Okay.

22 A.   -- correctly what your question was about.

23   MR. SUFFERN: Yeah. I'm trying to ask a technical computer

24 question, and I'm trying to figure out the best way to ask it

25 there. And I think that definitely is helpful there. So -- okay.

1 That's all of the questions that I have for right now. Thank you

2 for your time. Bart, I'll --

3   MS. KARAMALAKI: No problem.

4   MR. SUFFERN: -- hand it back over to you.

5   MS. KARAMALAKI: Thank you.

6   MR. BARNUM: Great. All right, thanks, Paul. Yeah, I have

7 some follow ups on that.

8   BY MR. BARNUM:

9 Q.   I'm trying to play a little bit of catch-up. I'm not a

10 weather expert like you guys are. But just to follow up on the

11 CAP alerts, they were new to me today, and some of the coloring

12 systems. So just to cover that one more time, I'm sorry, but so

13 the CAP alert will issue if it's severe or moderate, and then the

14 coloring system is determined by Windy.com; is that correct?

15 A.   That is correct. Exactly.

16 Q.   Okay. And who is making those -- that decision? Is it --

17 what member of your team?

18 A.   Well, it's -- I can't really say which exactly person that

19 really creates -- well, maybe I can. But it's policy decision.

20 Q.   What -- how many people are with Windy.com?

21 A.   Currently it's around 12 people, yeah. I think 12 of us is

22 right about.

23 Q.   All right. And just -- what is the background of the team?

24 Are they -- is it they're weather folks? Is there -- I mean, you

25 mentioned you're the marketing manager. What's the background of

1 the team?

2 A.   Well, initially there were only two members in the team, in

3 the beginnings of Windy. But later, things got bigger and they

4 had to move to the bigger offices and stuff like that. We don't

5 have any meteorologists at Windy. We only visualize that data.

6 So the majority of the team is developers and technical staff.

7   So if you would like to see -- like to know the background,

8 it's -- most of the members are -- that's about the extent of

9 this. So it's kind of stuff you really need to -- you really need

10 that kind of background and knowledge to be able to create

11 something like Windy. So to answer your questions, mostly

12 developers, and there is also other people like marketing and

13 customer support who work at Windy.

14 Q.   Okay.

15 A.   But the majority is developers.

16 Q.   And where is -- where are you located? Where are your

17 employees based?

18 A.   We are located in Prague, Prague (indiscernible), so -- it is

19 our only office.

20 Q.   Do you have any workers working remotely from different parts

21 of the globe?

22 A.   Currently I think there might be some external people. Two

23 or three, but it's not like they are part of the team. They are

24 maybe doing some other work. But the core part of the team who

25 are really -- who is really developing Windy is based in Prague,

1 and nobody is really working remotely.

2 Q.   Sure.   You mentioned earlier, the U.S. is the majority of

3 your users. Do you guys break that down any further to

4 geographically -- regions in the U.S.?

5 A.   Central's -- well, geographically I can't really say about

6 the -- each state. But I think our main regions are Alaska and

7 central U.S.

8 Q.   Okay. And if you don't mind me asking, how do you make

9 money? How do you get paid?

10 A.   Well, we have -- for a long time, we were a free application

11 for several years. But right now, we have launched Windy Premium,

12 which offers our users something extra for their contributions,

13 and that's a one hour forecast. And we are also planning 4 times

14 update per day for ECMWF model.

15   So right now you can have one hour forecast with Windy with

16 the Premium, and of course in the future we are planning to add

17 more features like that. And one application which is coming,

18 it's four times update for ECMWF. So it's our main income right

19 now.

20 Q.   Okay. And when do you implement that premium service?

21 A.   Well, in 2019, we launch kind of like a donation program

22 where our users could donate Windy to kept it going, which we

23 managed to gather quite a significant amount, which we were really

24 happy. But it really didn't cover our expenses for year or for --

25 to keep continue. So we actually thought that we want to create

1 something which would give users something extra for their

2 contribution, not just a donation, but actually some service, some

3 feature, which would help them decide, okay, Windy is the way to

4 go, so we launched Windy Premium.

5   Because Windy is still a free service. Of course all of the

6 platforms, the majority of the tools, and the tools which -- that

7 were free before, they are still free, and it's really a majority

8 of it is still free. But Windy Premium offers something extra if

9 you really like to use Windy and would like to contribute us, and

10 to help us going -- then Windy Premium is for the users.

11 Q.   So in 2019, you had the donation system. When did Premium

12 actually kick off? When was the launch of that?

13 A.   The launch was in March, if I'm not mistaking, or beginning

14 of April, yes.

15 Q.   Of 2020?

16 A.   2020.

17 Q.   And what is the price for that service, Premium?

18 A.   The monthly subscription is $2.99, and annual one is $18.99

19 in dollars.

20 Q.   Okay, yeah. And to date, what is your percentage of users

21 that use the Premium versus using the free service?

22 A.   Well, it's -- of course we are still in the beginning of the

23 premium program, so I can't really say the exact numbers. So I

24 think it's -- yeah, I would say it's still in the beginning, but

25 we are happy with the results. And we hope it will continue in

 1 this pace, which was in the beginning, and it's going really well.

 2 So we are happy with that.

 3 Q.   Okay. Do paid advertisers -- are they active on your site?

 4 And do you guys advertise different products on your site? You

 5 know?

 6 A.   No.

 7 Q.   No?

 8 A.   There is no kind of advertisement. It has never been, and we

 9 don't want it in the near future. So Windy was always ads free.

10 Q.   Okay. And how do you guys advertise your Windy.com? Where

11 -- what platforms are you on?

12 A.   Well, of course we are on Google Play and iOS, so this is

13 kind of way how to advertise our app. And it's also mostly about

14 recommendations that we have quite a good reputation, so people

15 are maybe naturally coming to us. And also, hurricane season is

16 really -- it's kind of bad to say, but it's really good way to us

17 -- good for us, because we are monitoring the cyclones or

18 hurricanes pretty well. And we also publish articles when

19 entering the track of the hurricane.

20   So it's kind of a way how to acquire people as well because

21 they search for hurricane, there would be our article, and they

22 can click on it, and they find out that there is a Windy service,

23 and there is a beautiful animation, and weather service that can

24 really help us in those kind of situations to monitor the severe

25 weather and extreme weather events. So -- okay, I think that this

1 is the way which we use, and other channels -- and our Windy

2 Community is also a sort of advertisement for us and to publish

3 our features and new stuff we add to Windy. So yeah, and also

4 social media of course. Twitter and Facebook, we have our

5 channels there. This also.

6 Q.   Okay. And you mentioned you're on Twitter and Facebook. Are

7 you directing that advertising towards certain groups on those two

8 platforms?

9 A.   No. We don't really target the audience like that. Maybe if

10 it's -- maybe by language if it's something in Italian, or some

11 other language, we of course target that. But we don't do that.

12 Q.   All right.

13 A.   Other than that.

14 Q.   Kind of what I'm alluding to is that, you know, we had spoken

15 earlier, and how we kind of -- to our understanding that the

16 commercial fishing industry in Alaska uses your app quite a bit.

17 Obviously you can see that since a lot of your users are in

18 Alaska. I didn't know if there was any particular platform or any

19 channels that you use to advertise directly to that community.

20 A.   Not yet. I think it's more like an actual development.

21 People have really heard about Windy, they explore it, and it's --

22 it takes time. And when there is a community, there is also

23 always a chance to -- we will acquire more users like that.

24 Q.   Okay. Great. Just a couple of clarification questions I

25 had. And you might have said it and I missed it. You were

1 talking earlier about Windy broadcasting in the alerts. Does the

2 -- just can you confirm, Windy.com, they broadcast here in

3 America, the National Weather Service alerts?

4 A.   Yes.

5 Q.   Yeah.

6 A.   It's -- CAP alerts are released by National Weather Service

7 agencies.

8 Q.   Okay.

9 A.   So it's what we get the data from.

10 Q.   And I guess my last question here before I pass it on, the --

11 I think Paul touched on this. The layers that you select, your

12 filters if you will, when you're utilizing your app, whether it's

13 desktop or on the phone, will they save when you close the app and

14 then come back in? Or do you have to reselect them?

15 A.   Well, they actually store it in your browser, so if you

16 select certain layers, they should be kept. But it's -- shouldn't

17 really rely on that. There are main categories like wind, rain,

18 thunder, temperature, those ones will be always available, but the

19 others you choose under them, like wind gusts, wind accumulation,

20 they usually stay if you choose them, but it depends on the

21 browser if they store it. But I wouldn't really rely on that.

22 Q.   Okay.

23 A.   But they should.

24 Q.   All right. And I have another question on that. If you're

25 actively using Windy and you lose internet connection, will it

1 still -- will it save what was there before, and you're able to

2 still use the older data? Or is the data lost? How does that

3 work?

4 A.   Well, Windy needs to be used with internet. But I think if

5 you use Windy and suddenly the connection went off, it should

6 display the last data retrieved. So if you have a wind

7 accumulation or wind animation on, it will display the past -- the

8 last animation it displayed when it had internet connection. So I

9 think yes, it should. Really it depends on the phone and on the

10 connection, but in general, you really need the internet

11 connection to use Windy.

12 Q.   Okay. And what is your most popular filter or layer?

13 A.   I would say it's rain and thunder is a really popular

14 layer --

15 Q.   Okay.

16 A.   -- among the users.

17 Q.   And can you -- I don't know if you know this. Can you break

18 it down geographically? You know, Alaska, what is the most

19 popular layer?

20 A.   In Alaska? Well, I don't think I can answer that right now

21 in -- which layer is popular -- the most popular in Alaska. So

22 I'm not sure about that right now. I'm sorry about that.

23 Q.   Okay. Maybe a follow up later maybe.

24 A.   Maybe a follow up, yes. We can --

25 Q.   Thank you. How about weather alerts? Is that in the middle

1 or the bottom? Is that used very much?

2 A.   The CAP alerts you mean? Weather warnings --

3 Q.   Yes.

4 A.   -- layer?

5 Q.   Thank you. Yes. Thank you.

6 A.   I think this layer is not that used among the users. I

7 think, it didn't have really much attention so far, but I think it

8 can be changed. I don't think it's one of the most popular layers

9 in Windy right now --

10 Q.   Okay. Great.

11 A.   -- when it comes to users.

12   MR. BARNUM: Okay, great. Well, thank you. That's all I

13 have right now. I'll have a couple of follow up at the end, but I

14 want to give the others on the line a chance to ask you some

15 questions.

16   MS. KARAMALAKI: Of course.

17   MR. BARNUM: So I'm going to pass it over to the U.S. Coast

18 Guard. Do you have any questions for Ms. Karamalaki?

19   CDR ▮▮▮▮   Yes, a couple of follow-ons. Again, this is CDR

20 ▮▮▮▮ ▮▮▮▮   with the Coast Guard. And, ma'am, I am very thankful

21 that you've made the time to speak to us today, so thank you for

22 that.

23   So I have a couple of questions that are going to bounce

24 around just based on the information that you've provided, which

25 was very thorough. I just wanted to verify some -- just

1   administrative information.

2   BY CDR ████

3   Q.   Is it fair to say that when you describe the background of

4   the Windy team members, that they are essentially coders and

5   software engineers, as well as marketing in terms of their

6   background? Is that fair to say?

7   A.   I think it's very accurate. When it comes to majority of

8   team, it's -- well, software developers, software engineers, and

9   yeah, there is some more marketing team, but it's -- I'd say

10 minority of the team. So -- we have 12, so yeah, there is not

11 many people. But most of them is technical, like engineers and

12 software developers.

13 Q.   And then is it also correct -- is my processing correct in

14 that you said there is nobody on the team that has formal training

15 or certification, like in meteorology or with the weather? Is

16 that correct?

17 A.   That is correct.

18 Q.   I'd like to ask some follow-on questions about your user

19 base. How many users did you say Windy has?

20 A.   Well, there is an average 1 million users per day. It's

21 while -- they'll -- for example, during the hurricane season,

22 there could be like 10 million users a day when there is a big

23 hurricane like there was on East Circle [sic] one month ago. We

24 had a record. It was, I think 10 or 11 million people per day.

25 So it --

1 Q.   So it -- in order for people to access even the free

2 application, they need to download it, and it -- let's say the

3 iTunes, right? Or not iTunes, but like the application icon in

4 whatever platform that they use, they have to download even the

5 free portion. Do you guys at Windy keep track of that user base?

6 A.   Of course if you want to use Windy on your mobile phone, you

7 need to download it. But to use Windy, you don't really need to

8 have a Windy account. So there are two really views on that. If

9 you want to use Windy, you want to, for example, save your

10 settings or, I don't know, save to your favorites some of your

11 favorite places, that kind of stuff like that, you really need a

12 Windy account to store that information on. But if you want to

13 just regular use Windy without any account, it's also possible.

14 It will just -- your settings won't be saved on that. But when it

15 comes to iOS, like Google Play, we have over 10 million downloads

16 on each platform. So --

17 Q.   Okay. That was 10 million, correct?

18 A.   Yes, 10 million.

19 Q.   Sorry. I just -- a little bit of issue with the phone,

20 sorry.

21 A.   No problem.

22 Q.   So in terms of persons that contribute or subscribe to the

23 premium app -- I guess before even the premium app, did you keep

24 track of persons that contributed?

25 A.   What kind of -- you mean like a data about the users? Or --

1 Q.   Yes, ma'am.

2 A.   I'm not sure. Well, the users, they -- there was like three

3 ways to donate to Windy. It was via app store; Google Play, so

4 via Android; or by our platform, (indiscernible). So there are

5 three ways of donating to Windy, and if the person decided to

6 donate to us, it would go through the platform, for example,

7 through the Google, through the store. And of course I don't know

8 how they read the data, but they -- I think they keep some data

9 about the user, because the user already has some account with

10 them. So I think they would be able to base information about

11 them.

12 Q.   Are you able to track -- is -- at Windy, are you guys able to

13 mine the data to figure out if a specific person was using your

14 application?

15 A.   I don't think -- I don't really know what you mean, to be

16 honest. Like, okay, if the person donated, if we are able to know

17 if the person used Windy? Or maybe, you can specify it, the

18 question?

19 Q.   Sure. So if we wanted to try and confirm whether a specific

20 individual used the Windy app, let's say, on their tablet, is

21 there a way that your company can say, oh, yeah, this person --

22 like I would think that, with the Premium, perhaps you guys might

23 have a better way to do that. But previous to launching the

24 Premium service, are you able to see if a specific user is using

25 your app?

1 A.   Well, if the user has a Windy account, then obviously we can

2 see if the user has an account, and if it was active on the

3 account, it was also visible in the community. So it really

4 depends. If --

5 Q.   Okay.

6 A.   -- the user has an account, then yes, we can say, yeah, this

7 user was active. And of course we don't, we don't know if he has

8 application downloaded, so there's a lot of factors which goes in

9 it.

10 Q.   Okay. As a follow up, would we be able to ask you to --

11 after this meeting of course -- check to see if some certain

12 specific people were in your database to see if they had an active

13 account? And we can provide those names, you know, after. Is

14 that something that we would be able to do with you guys?

15 A.   Well, I'm not sure right now. I would need to ask my

16 colleagues about that.

17 Q.   Okay.

18 A.   It's a matter of discussion, I would say.

19 Q.   Sure.

20 A.   So I would let you know.

21 Q.   Thank you. I appreciate you -- your consideration in that.

22 Jumping topics a little bit, does Windy retain historical data for

23 the layers that are built?

24 A.   Well, Windy doesn't store that sort of data. So we don't

25 store any data when it comes to layers. The only thing we can

1 access some kind of data, it's through our weather stations. It's

2 overlay in Windy, and it works like, where there's certain users

3 or many users share data, we'd ask, from their weather stations.

4 And if you click on station from the location you are interested

5 in, it will give you an overview of the past several days where

6 you can see like some basic parameters like wind, wind gusts,

7 temperature, or if there was a wave or not.

8   So yes, there is a way to access data through the Windy

9 stations, but we don't store any data about the forecast and other

10 layers. So basically, in general, no, we don't.

11 Q.   Okay. So if -- are you guys able to -- based on that last

12 answer, since you don't receive historical data of the layers, are

13 you able to take historical data from, let's say, the National

14 Weather Service to recreate what Windy would have shown up on the

15 app? Are you guys able to recreate that with your software?

16 A.   Maybe it's possible. It probably would be possible

17 technically, but it would really depend on the case and what kind

18 of data we would visualize, some stuff like that. But we are --

19 it's not like our scope of interest to do that at moment --

20 visualize after data. So -- but technically it's -- I would say

21 it's possible. But it would really depend.

22 Q.   Okay. Onto a different topic. You mentioned that Facebook

23 was a way -- was a platform that Windy kind of gets out there and

24 helps them in developing kind of name recognition and that there

25 is the Facebook group. Could we ask you to please check to see if

1 any specific personnel are attached to that Facebook group and

2 have that as a follow up? Well, I -- just because I just want to

3 see if maybe that's -- let's see. We're trying to establish to

4 see if your app was used.

5 A.   I think that is also a matter of the protection of users. So

6 I'm not sure if it's possible for us to do that. You know, it's

7 kind of a matter of data protection of our users. So it's a

8 matter of discussion, I would say.

9 Q.   Okay.

10 A.   So, yeah, I really cannot answer that right now.

11 Q.   Not a problem. You -- when we were talking about the weather

12 models that are -- that can be used, you talked about the GFS, you

13 talked about ECMW [sic]. Does the user have the ability to

14 manually choose which model? And then can you explain how the

15 weather model -- like can you explain those data sources and how

16 that leads into the weather model, and then how the programmers

17 create your weather?

18 A.   Well, the user, when he comes to Windy, the base model is

19 ECMWF. He is able to change to a different model. It depends on

20 the location. Of course, if you are in U.S., we will not be able

21 to switch to local models like ICON, because they're only for

22 Europe. So you have -- you would have to be zoomed in the -- on

23 Europe to be able to switch that. So for example, for U.S., you

24 have the options -- you have three options. It's NAM, it's ECMWF,

25 and GFS. For example, on ECMWF, we have a partnership with a

1 company who's an institute, and we get -- there's a dataset from

2 them, and then we visualize them.

3   The models are updated -- it depends on the model itself.

4 For example, ECMWF is updated three times a day. There is

5 different between big time and reference time. The reference time

6 is usually defined when the model is being computed. So the

7 computation process usually takes about 7 to 8 hours. And when

8 it's finished, it is updated on Windy. So it's update time. And

9 for example, the update times for ECMWF, the reference time is

10 midnight and the update time is usually around 7:00 a.m. And then

11 there is another reference time at 12:00 a.m. [sic], and then it

12 updated again at 6:00 or 7:00 p.m. This is how it works.

13   Of course it's different for each model. With the GFS, it's

14 updated every 6 to 7 hours, and so when the model is computed,

15 then we are able to update it on Windy. So this is how it works

16 when it comes to (indiscernible), for example, and ECMWF.

17 Q.   So I'm processing as you're describing this. So then that

18 sounds like there's specific times that there's an update, there

19 is a little bit of a lag. Is that fair to say?

20 A.   I wouldn't say it's a lag. It's -- because the data are for

21 a certain period. So for example, if you knew the forecast like

22 now for a certain location, you can see that the data where -- for

23 example, right now I'm looking at the U.S., and the reference time

24 was 12:00 a.m., your time. So --

25 Q.   That makes it --

1 A.   -- data -- yes, I'm sorry I interrupted you.

2 Q.   No, no, no. That's perfect. I -- that clarified for me what

3 you were explaining, since it was taking the time range. Thank

4 you.

5 A.   No problem.

6   CDR ███████ Mr. Barnum, I don't have any additional questions

7 at this time. I know my colleague does.

8   LCDR ███████████ Hi. So this is LCDR ███████ ████████ with the

9 Coast Guard also. Again, thank you for taking the time with us

10 today. I just want to make sure I fully understand what you were

11 describing.

12   BY LCDR ███████████

13 Q.   When they're looking at the app, the updates -- and I'm kind

14 of going through the app at the same time. So depending on what

15 models are being presented for the layers, you're saying that they

16 can see the time until the next update, and it gives the period

17 for each model that it's drawing from; is that correct?

18 A.   That's correct, yes. If you're on the desktop, you can

19 see -- for each layer and for each model, you can see a little

20 clock symbol in the right corner -- right bottom corner. And

21 there is a reference time and update time. For example, right now

22 it was updated 2 hours ago, and next update is expected at -- in 4

23 hours for example. It can change, but usually it is in these

24 times.

25 Q.   Okay. Excellent. And then I really have one general

question about your Facebook group. Is the Facebook -- what is

the Facebook's target audience and focus area for membership?

A.   Well, you mean the focus area, what we were focusing on in

the beginning when we started the Facebook? Or right now, what is

the focus area?

Q.   Yeah, right now. Are you -- is it more of a collaborative

group on updates to the application? Is it more on sending

information out to the end users? Or, you know, how is this group

really intended to be used?

A.   Well, it's -- for us, it's used mainly for updates about

application, about also news regarding some extreme events. We

regularly post the cyclones and hurricanes; we create trends and

interesting visualization based on Windy data and Windy.com. So

it's kind of a communication channel for us, but it's -- of

course, it's not only Facebook. It's other channels as well that

-- yes, we have some kind of community there, and users who are

interested in other -- the updates about the events. So that's

what we offer them on the channel.

     LCDR   Okay. Thank you very much for answering all

of your questions today. We really appreciate it.

     MS. KARAMALAKI: No problem.

     LCDR   That's all.

     MR. BARNUM: Okay, great. Anyone else form the Coast Guard?

     (No audible response.)

     MR. BARNUM: All right. Noelle, would -- do you have any

1 questions? Noelle Runyan?

2   MS. RUNYAN: Yeah. Thank you. I have a couple.

3   BY MS. RUNYAN:

4 Q.   When data is missing -- not necessarily model data, but other

5 types of data. When it is missing, does it indicate as missing?

6 Or does it just show the latest known? For example, if there is

7 an observation that you normally see, and it is now -- you

8 normally see it once an hour, but it's now 8 hours old, will it

9 indicate that it's missing? Or will it just be the 8-hour-old

10 data?

11 A.   It depends on the data. Maybe if you could specify? When it

12 comes to, for example, wind based data, it depends on the model.

13 If you see that the model was updated 8 hours ago, it doesn't mean

14 that the data is old, but that the next update is in, for example,

15 4 hours.

16   So the data are relayed until the next update. So they are

17 not all up there while it's in -- at the next update, they are

18 updated to do the next dataset, which was computed at some

19 reference time before. So -- but I think you mean something like

20 when the data is missing, for example, in -- really hard to say.

21 Q.   For --

22 A.   Yeah.

23 Q.   Yeah, for example, an observation from an airport.

24 A.   So you mean METAR update for example?

25 Q.   METAR, yes.

1 A.   Yes. Well, I don't think we would show the latest dataset

2 when it comes to METAR. They are like, more like for one and --

3 one hour I think is -- I think it's correct. And if the data is

4 missing, then we don't show the base data.

5 Q.   Okay. And different topic. Although you've kind of answered

6 a lot of this, and I feel like this is a slightly different

7 question. Do you -- can you give a number of users on a certain

8 platform? For example, what -- how many or what percentage of

9 your users are on iOS and what percentage are on desktop?

10 A.   I don't think I can give you a percentage, but I don't --

11 well, the average about -- average of computer users and iOS

12 users. So I think we have more iOS users, so there is -- some

13 (indiscernible). But to be honest, I think I would probably

14 include it in the follow up if it would be still for your interest

15 with some more detailed data about this. So I don't think I can

16 give you a clear answer right now. So it would be in the follow

17 up. So --

18   MS. RUNYAN: Okay. All right. That's fine. And I think

19 that's it. That's all I have. Thank you.

20   MS. KARAMALAKI: You're welcome.

21   MR. BARNUM: All right. Thank you, Noelle.

22   Mr. Barcott, do you have any questions?

23   MR. M. BARCOTT: Yes, thanks very much. Ms. Karamalaki,

24 thank you very much. I introduced myself at the beginning. I'm

25 Mike Barcott. I'm the attorney for the owners of the *Scandies*

1   *Rose.* So thank you for making yourself available for this.

2   And I'm going to be jumping around a little bit, because I'm

3   following up on other peoples' questions. So if it's not clear to

4   you what I'm asking, please let me know. And I will tell you at

5   the outset, I am not a techie guy. So if my questions sound

6   really stupid, please bear with me.

7   MS. KARAMALAKI: No problem.

8   BY MR. M. BARCOTT:

9   Q.   Are you able to tell us, for the area southwest of Kodiak

10 Island in Alaska, within 200 miles, are you able to tell us what

11 would be the sources of the weather data that Windy gets for that

12 area?

13 A.   It really depends what data are you looking for. When I take

14 a look at Alaska, then you have, like I said, three models

15 available. It's NAM and ECMWF and GFS. And then it depends what

16 kind of parameters are you looking for. Are you looking for a

17 wind data? Or rain, temperature, clouds, waves? It would really

18 depend on that. And of course, then you can determine what kind

19 of data we will be getting. So maybe if you could specify?

20 Q.   Sure. So I think the data I think that all of us on this

21 call would be interested in is the wind data, the temperature

22 data, and the wave data. What would be the sources of those bits

23 of information?

24 A.   Well, the possible sources are ECMWF, GFS, and NAM. So those

25 are the global models you can choose from, and then you can get

1 the data. You can also compare those three models in the detail

2 of the forecast and get some approximate correlation between them,

3 so most probable value for wind or for other parameters that will

4 occur at this certain time. So if you are looking for a forecast

5 for the next day, then you can compare those models and get the

6 data. Or you can just choose one model; it's really up to you.

7 Q.   Thank you. And do I understand correctly that Windy itself

8 doesn't do an independent forecast analysis? It displays the

9 information from the sources it utilizes; is that correct?

10 A.   That's correct, yes. We don't create any forecasts on our

11 own. We only visualize the already done data or the delivered

12 data from the -- several sources.

13 Q.   So if, for example, the captain of the *Scandies Rose*, at

14 7:30 p.m. Alaska Time on the 30th of December, went onto your app

15 to see what your forecast might be, are you -- and I think Alaska

16 time is either 9 or 10 hours earlier than the Czech Republic

17 -- are you able to tell me the age of the data contained in the

18 forecast that he would be looking at?

19 A.   Yes. You can see that, like I mentioned, in the detail of

20 the model. So it's like a little clock symbol, and there you can

21 actually see if you -- it depends on the model of course. Right

22 now, I have selected ECMWF, and there is -- the data are all the

23 -- well, for right now, the reference time was midnight, so the

24 data are from midnight of 29th [sic] of July. So you can --

25 Q.   So --

1 A.   -- clearly see -- yeah.

2 Q.   I'm sorry. Continue. I'm sorry.

3 A.   No, no, no. It's already -- that's my --

4 Q.   Okay. So but as I understand it, historically, if we wanted

5 to know what data he saw on the 30th of December, 2019, Windy does

6 not have that data stored; is that correct?

7 A.   That's correct, yes. We don't store those data. Past of the

8 data, I don't store it on Windy.

9 Q.   Is there any way that you can actually reconstruct what our

10 captain saw, if he looked at 8:00 p.m. December 30th, 2019?

11 A.   I don't think there is a way for us to visualize that for the

12 moment. Or it would be really -- like I said, it's not the

13 average scope of services, what we do that we would visualize past

14 data. Because we take the data, we take the dataset, and we

15 visualize it, and it's pulled up to some time, up to the next

16 update, which is usually in next 12 hours, and then we don't store

17 it. We don't visualize it anywhere else. So yes, it would be up

18 to some discussion if -- how -- if it would be possible to be done

19 and visualize.

20 Q.   CDR █████ asked you a question, and I just want to be certain

21 I understood the answer. We are all curious whether our captain

22 looked at Windy and when he looked at Windy. Do I understand, you

23 don't keep that information about when a particular user may have

24 taken a look at your app?

25 A.   I don't think we keep those information. I would really need

1 to ask some of other members of the team. But I don't think this

2 is possible to extract from Windy.

3 Q.   So when a user looks at your app, does it show real time,

4 current time data, or is it just the forecast?

5 A.   Well, our main focus is forecast. And for example, we have

6 platforms like weather stations, and they send, for example,

7 5 minutes of data for a certain location. And then you can see --

8 on this layer, you can see, okay, that there is a temperature like

9 this. It's real time, and it's based on the weather station of

10 each owner.

11   So yes, we visualize only forecast. So if you look at all of

12 the layers in Windy, you will see only forecast, not real time

13 data. Unless it's radar, it's real time visualization of

14 precipitation. And then you can also use Windy station, which

15 reports data on a real time basis. So -- but yes, in general, we

16 are only forecast-based platform.

17   MR. M. BARCOTT: Okay. Thank you. I have -- we use your

18 service. We find it very useful. Thank you. I don't have any

19 other questions.

20   MS. KARAMALAKI: Yeah.

21   MR. BARNUM: Great. Thank you. Anyone else that has not

22 asked a question yet, do you have any questions?

23   (No audible response.)

24   MR. BARNUM: Okay then. We'll pass it back to Mr. Suffern

25 from NTSB to see if he has any follow ups for Korina.

1   MR. SUFFERN: This is Paul Suffern. I have no follow ups. I

2 just appreciate everyone's time.

3   MR. BARNUM: Okay. Thank you, Paul. I do have just a couple

4 of follow ups here. I know we're -- we've been going almost an

5 hour and a half. And thank you. I really appreciate it.

6   BY MR. BARNUM:

7 Q. But the -- I know we were talking updates, and you'll have to

8 forgive me, I'm not familiar with your app. But is that -- is it

9 easily viewed to the user -- can they easily see that, the time

10 that their forecast was last updated? And where is that

11 displayed? You mentioned a clock or something?

12 A.   Yes. Well, it depends on the platform. On the desktop, it's

13 quite well visible. It's -- if you open Windy, then there is a

14 little clock symbol in the right corner. Like right bottom corner

15 of the -- of display. And if you click on it, you will be

16 presented with actually information about the model itself. There

17 is a description of the layer you are looking at.

18   So right now, I'm looking wind, so there is a description

19 what the layer actually shows. There is a description also about

20 the model itself, that is -- right now I have ECMWF 9km, and there

21 is forecast model, update interval, it's 12 to 13 hours. It's

22 base information about the model. There is the provider, and also

23 there is reference time; updated time, which is 10 hours ago; and

24 next update, which is expected at -- in 2 hours from now. So --

25 Q. Does Windy offer any warnings if there is an old forecast to

1 the user? This hasn't been updated in 10 hours, beware?

2 A.   If there is any warning that it hasn't been updated in 12

3 hours? What do you mean actually?

4 Q.   So if I'm looking at a forecast, and it hasn't been updated

5 in 12 hours, I missed the little clock saying so, is there any

6 kind of warning that says, hey, this is an old forecast?

7 A.   No, there is no kind of warning like that. Actually, this

8 interval is normal. It's -- the interval is 12 hours, so if it

9 was updated 10 hours ago, then it's okay; it's still within the

10 range -- the correct time. Sometimes due to some computation

11 problems or some issues, they can take longer, but it's very rare.

12 We don't experience those issues -- problems.

13 Q.   And to follow up a question that I had earlier, because I

14 learned something throughout the interview, so you have users that

15 will just actively use your app, and then you'll have users that

16 will register and have an account, and then you have Premium users

17 that pay for their registered account.

18   I believe I asked you percentage earlier between paid users

19 and free users. What is the percentage of account login users

20 versus just active, non-login users?

21 A.   Well, I believe on our Windy Community, and -- so we can

22 count around 2 million accounts. That's -- so with an account,

23 active Windy account. So I would say it's about 1.5 to 2 million

24 people with Windy accounts.

25 Q.   I'm sorry, you broke up a little. Was that 1.5 million?

1 A.   1.5 million or 2 million with Windy account -- registered

2 users.

3 Q.   Okay. All right. And at any given time, I know you

4 mentioned there's about 1 million users. How many of those users

5 are registered account users?

6 A.   I don't really have that kind of data at the moment, so I

7 can't really properly answer that, what's the percentage of that.

8 Q.   Okay. And if one of those account users -- login users was

9 actively using your account -- I know you've sort of answered this

10 before, you would be able to tell if that person was actively

11 using it, correct?

12 A.   If the user was active on this account and -- so you mean

13 that's -- if you could see that he was using the application; is

14 that correct?

15 Q.   Yeah. So if I had an account with you and I logged into the

16 account and I was using your app, could you tell that it was me

17 using the Windy app at this particular time?

18 A.   If you have a Windy account, and it's connected with your

19 device. But I don't think we are able to say that you were

20 actively using it -- using your app. So it's one thing that you

21 have an account, and you're active on it, you could be active on

22 the community, but there is no really -- well, I would have to

23 check it, but I don't think we can see that you were using Windy

24 really. Because we don't store that kind of information.

25 Q.   If I log on my desktop, I log in my account, and I had all of

1 my saved layers and my saved waypoints and all of that, would you

2 be able to see that I'm logged in and using it?

3 A.   I'm not sure at the moment. I would have to check with my

4 team.

5 Q.   Okay.

6 A.   With the team -- so --

7   MR. BARNUM: Okay. Great. Just going through my list here.

8 Okay. That's it I guess, for what I have right now. I'm just

9 going to go back around the room -- the virtual roundtable here.

10   And does anyone have any follow ups?

11   CDR ████   This is ████ ████   None for me. Thank you so

12 much, again, for taking the time to be online with us.

13   MS. KARAMALAKI: You're welcome. It was a pleasure.

14   MR. M. BARCOTT: This is Mike Barcott. I don't have any

15 follow ups.

16   MR. BARNUM: Okay, great. I guess that's everybody. It's an

17 hour and a half marathon. And, Korina, I really appreciate it.

18 You spoke both very technical and very novice for some of us that

19 aren't familiar with the application. And I appreciate you

20 talking on a broad range.

21   I might just mention, we've been talking about a couple of

22 follow ups that we're going to channel in emails to you. I would

23 appreciate that. Anybody on the line that has a follow up, just

24 channel it through me. I believe you all have my email, if you

25 don't mind. And then it's just one source going to Korina.

1   So great, thank you very much. I'm going to stop recording.

2 The time is 1:52 p.m. Eastern time, and the recording is stopped.

3   (Whereupon, at 1:52 p.m., the interview was concluded.)

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: CAPSIZING AND SINKING OF THE
                           F/V *SCANDIES ROSE* NEAR SUTWIK
                           ISLAND, ALASKA, DECEMBER 31, 2019
                           Interview of Korina Karamalaki

ACCIDENT NO.:   DCA20FM009

PLACE: Via Microsoft Teams

DATE: July 29, 2020

was held according to the record, and that this is the original,

complete, true and accurate transcript which has been transcribed

to the best of my skill and ability.

                                    _____

                                    Christy Wilson
                                    Transcriber