UNITED STATES DISTRICT COURT EASTERN DISTRICT OF NEW YORK

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KOREAN AIR LINES CO., LTD.,

Plaintiff, Counter-claim Defendant,

against -

MEMORANDUM & ORDER 10 CV 2484 (PKC) (JO)

KAMALL A. MCLEAN,

Defendant, Counter-claim Plaintiff.

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PAMELA K. CHEN, United States District Judge:

This action was brought to determine liability for a ground collision at John F. Kennedy International Airport ("JFK") on June 9, 2009, when a taxiing Boeing B747–400 cargo aircraft (the "Aircraft") owned and operated by Korean Airlines ("KAL") struck a stationary construction boom truck (the "Truck") owned by Tully Construction Company ("Tully") and occupied by Tully employee Kamall A. McLean ("McLean"). The Port Authority of New York and New Jersey ("Port Authority"), as the operator of JFK airport, contracted with Covenant Aviation Security ("Covenant") to provide security services at JFK at the time of the incident. Jurisdiction is based on diversity of citizenship. 28 U.S.C. § 1332.

KAL initiated this action on June 1, 2010 to recover damages to its aircraft, naming McLean, Tully, Covenant, and Port Authority as defendants. (Dkt. 1.) The defendants subsequently answered and asserted cross—claims and counter—claims. (See Dkts. 18, 32.) Tully and McLean filed a third—party complaint against the United States based on actions of the Federal Aviation Administration ("FAA"). (Dkt. 45.) In January 2011, McLean filed a motion to amend his answer to assert personal injury cross and counter—claims against KAL, Covenant, and Port Authority. (Dkts. 47, 48, 52.) All claims were resolved prior to trial, with

the exception of McLean's negligence counterclaim against KAL for physical injuries he allegedly suffered as a result of the collision. (Dkts. 119, 148–49, 150, 156–57.)

At a final pretrial conference held on December 19, 2014, the trial on McLean's negligence counterclaim against KAL was bifurcated into a liability phase, and if necessary, a damages phase. A bench trial on the liability phase was held between January 12 and 22, 2015.

Having reviewed the parties' submissions, the evidence presented at trial, and assessed the credibility of the witnesses, the Court sets forth the following findings of fact and conclusions of law pursuant to Federal Rule of Civil Procedure 52. For the reasons stated below, the Court finds that KAL's breach was a proximate cause of the collision. However, because the negligence of McLean, Port Authority, and Tully also contributed to the accident, KAL's equitable share is subject to adjustment based on New York Civil Practice Law and Rules Articles 14–A and 16. A final apportionment of fault, and a determination of whether KAL is entitled to an offset against the final damages amount under General Obligations Law 15–108, will follow a trial on damages.

FINDINGS OF FACT

The incident that gave rise to this action occurred shortly after midnight on June 9, 2009. (Dkt. 163 at 40 ("Stip. Facts") ¶ 4; DX H at 5, 17.) After landing at JFK, the KAL pilots followed FAA Air Traffic Control ("ATC") directions to proceed to taxiway Y. As the Aircraft taxied in a southwesterly direction on the centerline of taxiway Y, the outermost engine of its right wing collided with the Truck, which was parked behind barriers on the shoulder of taxiway Y, causing the Truck to flip onto its side and allegedly injuring McLean. (Stip. Facts $\P\P$ 7, 8; DX H at 2–6.)

2

¹ Citations to "DX" refer to KAL's trial exhibits. Citations to "PX" refer to McLean's trial exhibits.

At the time of the accident, taxiway Y was 75 feet wide, measuring 37.5 feet from the centerline to the double yellow taxiway edge line. (PX 13; DX H at 2.) The taxiway shoulder consisted of an additional span of asphalt, followed by a border of gravel. (*See* PXs 5–6, 31, 32.) To the west of taxiway Y was the site of an ongoing taxiway extension project (the "Project") being performed by Tully pursuant to a contract with Port Authority. (Stip. Facts ¶ 2; DX D; Tr. 937, 1581.) Based on Port Authority's instructions, Tully had installed orange and white "low–mass barriers" along the taxiways and runways around the Project site months before the accident. (Tr. 127, 206, 643–44, 781, 805–07, 891–93, 898, 902, 974; *see* PXs 6, 17; DX F.) The barriers were 18–inches in height and featured solar–powered sensor lights that flashed when in darkness. (Tr. 644, 736, 805, 896, 1058, 1079; *see* PXs 6, 17; DX H at 3.) At the border of taxiway Y, the barriers were positioned on the shoulder asphalt west of the double yellow taxiway edge lines, approximately 44 feet from the centerline. (PXs 6, 13, 17; Tr. 126, 206–07.)² There were no other physical barriers placed at the Project site on the night of the accident. (Tr. 164–65.)⁴

In the months leading up to and including the night of the accident, Tully maintained construction equipment and supplies at a staging area on the Project site adjacent to taxiway Y. (Tr. 642, 843–44, 884–85; PX 16; DX H at 40.) On the night of the accident, Tully was

² Low-mass barriers signify areas where an aircraft's wheels cannot proceed for any number of reasons (Tr. 1797–98), including ongoing work (Tr. 215–16), an open excavation (Tr. 775, 807), a difference in gradation (DX H at 3), or ground that is too soft to support the aircraft's weight (Tr. 1798).

³ All references to the "night of the accident" denote the night shift going from June 8 into the morning of June 9, 2009.

⁴ After the accident, Port Authority instituted a new practice to set safety cones or other physical barriers to mark areas beyond a taxiway that should be kept clear of obstructions. (Tr. 804–05, 813–15.)

performing excavation and drainage pipe installation work northwest of the staging area, toward the intersection of runways 4L-22R and 13L-31R ("construction area"). (Tr. 750, 855, 857, 861, 960.)

Pursuant to Tully's contract with Port Authority, runways and taxiways were open to aircraft traffic unless Tully requested a closure and the request was approved. (DX D at 138; Tr. 968–69.) As with all contractors at JFK, Tully was required to request and obtain a closure from Port Authority prior to each night of work in an Aircraft Operation Area ("AOA").⁵ (DX H at 26; Tr. 846–47, 965, 969.) Port Authority then approved or disapproved the request and informed Tully, typically over the phone. (Tr. 846–48, 965.) If Port Authority approved a closure, it issued a "Notice to Airmen" (NOTAM") to alert pilots of the closure, and assigned Covenant security personnel to the work site. (Tr. 820, 844, 848–49).

Tully's contract with Port Authority for the Project provided that "it is anticipated but not guaranteed that certain . . . taxiways[] . . . will be shut down to aircraft operations for limited periods at the times required by" Tully. (DX D at 138.) Because "aircraft may be taxiing through and around the construction areas," the contract required Tully to perform its work in a safe manner in accordance with contract requirements. (*Id.*) Among those requirements was that "aircraft operations shall always have priority over any and all of [Tully's] operations." (*Id.*) The contract further provided that when a taxiway is active, Tully had to maintain an area free of obstacles, or an "Object Free Area," ("OFA") 160 feet beyond a taxiway centerline. (DXs D at 141–42, R–3a; *see* DXs E at A–2, J6 at 38; Tr. 802–03, 833–34.) Work could proceed within

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⁵ The AOA is defined as the portion of the airport controlled by ATC that is used for surface maneuvering of aircraft. The AOA includes the airport's open runways and taxiways, and areas that are required to be free of objects, known as Object Free Areas. Loading ramps and alleys are considered non-movement areas. (DXs D at 138, E at A-2; Tr. 1397, 1576, 1727–28, 1865.) In addition, Port Authority has the ability to create non-movement areas by closing runways and taxiways. (Tr. 1727–28, 1752.)

160 feet of a taxiway centerline only when the taxiway was closed, in which case there was no operative OFA. (DX D at 141–42; Tr. 1661–62.) On the night of the accident, there were no indications along taxiway Y demarcating a 160-foot OFA. (Tr. 803, 1583.)

For a considerable period prior to the night of the accident, Port Authority approved Tully requests to close taxiway Y each night, and issued NOTAMs so that work could proceed on the Project. (DX H at 3; Tr. 663, 820–21, 844, 873–74, 885–86, 897–98, 949, 972.) According to the Tully Supervisor for the Project, Peter Davi ("Davi"), Tully workers typically worked in a closed area. (Tr. 945, 970-71.) During the time that Tully Foreman, Joseph Montana ("Montana"), worked at the Project up to the night of the accident, taxiway Y was closed when the Tully workers were on-site, and no aircraft used the taxiway. (Tr. 873-75, 885–86, 897–98, 900–01.) Tully work crews drove on taxiway Y in order to transport materials and equipment from the Project's staging area to the areas where construction work was underway. (Tr. 818, 838, 873-75, 885-86, 898, 972.) Because Montana viewed the enclosure as a permanent work area and the use of taxiway Y as necessary for the Project, he believed that the runways and taxiways surrounding the work area would be closed unless he was notified otherwise. (Tr. 874, 878-81, 885-86, 899-901.) Davi and Montana expected that if the area was not closed, Port Authority would inform Tully, and either work would not proceed on the Project site or Port Authority would place cones to delineate areas that were safe for workers. (Tr. 880, 898–901, 945–46, 969–72; see Tr. 210, 803.)

Although Tully requested a closure of taxiway Y for the night of the accident, Port Authority did not put the closure in effect, and taxiway Y was open to air traffic at time the accident occurred. On the morning of June 8, 2009, Davi made an oral request to Port Authority Inspector Joseph Mannino ("Mannino") to close taxiway Y in advance of that night's work. (Tr.

965–66, 968; DX H at 26, 43.) At 10:50 a.m., Mannino sent an e-mail to Port Authority personnel indicating that the intersection of runways 4L–22R and 13L–31R would be closed from June 8, 2009, at 11:00 p.m. until June 9, 2009, at 7:00 a.m., and that taxiway Y would be closed on June 9, 2009 from 6:00 a.m. to 2:30 p.m. (DX N; Tr. 851–53.) At around 2:31 p.m., pre-existing NOTAMs regarding the closure of taxiway Y were canceled, and taxiway Y became operational. (DX H at 3; Tr. 845, 1055, 1178, 1706, 1797.) As taxiway Y was not scheduled to be closed again until 6:00 a.m. on June 9th, it was active at the time of the collision. (DX N; Tr. 851–53.) No NOTAM was issued regarding construction to the west of taxiway Y, or to limit the wingspan of aircraft using taxiway Y that night. (DX D–5 at KAL001358; Tr. 1055, 1797, 1799–1800.)

Prior to the night shift on June 8, 2009, Port Authority provided Covenant's administrative office with a list of taxiway and runway closures, as was done on a daily basis. (DX Z-2; Tr. 998–1003.) That document indicated that Tully would be working at the intersection of runways 4L–22R and 13L–31R, that these runways would be closed from July 8, 2009 at 11:00 p.m. to July 9, 2009 at 7:00 a.m., and that three Airport Security Agents ("ASA") were required on–site. (DX Z–2 at CAS 0530; Tr. 999.) The Covenant ASAs on duty during the accident were Jay Warner, Clarence Nesmith, and Nelson DeGracia. (Tr. 505, 1022.) Although Covenant did not have a regular practice of alerting ASAs regarding which taxiways were closed or open (Tr. 545, 1006–07, 1026–31; *see* Tr. 188), the assigned ASAs treated

⁶ Evidence suggests that wind conditions necessitated the opening of runways 4L and 22R for at least part of the night. (Tr. 822, 845.)

⁷ The e-mail does not reflect whether Tully had requested to close taxiway Y for the night. (DX N; Tr. 853.) The only evidence that Tully requested closure of taxiway Y for the night of June 8 (going into June 9) is Davi's testimony about his oral request to Port Authority. (Tr. 965–66.)

taxiway Y as open the night of the accident (Tr. 203, 210).⁸ Additionally, Port Authority informed at least some Covenant personnel at the Project site that taxiway Y was open that night. (Tr. 750; *see* DX H at 25, 44.)

Neither Port Authority nor Covenant alerted Davi, Montana, McLean, or other Tully personnel that the request to close taxiway Y had been denied and that the taxiway was open on the night of the accident. (Tr. 678, 766, 874, 881, 883, 885–86, 901, 966.) Davi did not recall Mannino or anyone telling him there was a problem for the night's work, or that taxiway Y was open. (Tr. 965–66.)

Chris Ragnauth ("Ragnauth"), the Port Authority Resident Engineer who was assigned as the Construction Inspector for the Tully contract, was aware that taxiway Y was open. (Tr. 746, 748–50, 771; DX H at 23; *see* DX N.) Prior to escorting the Tully work crew into the AOA and the Project site, Ragnauth informed Montana that runways 4L and 22R were open and that the Tully crew needed to await clearance before beginning work at the construction area. (DX H at 23; *see* Tr. 861–62.) Ragnauth did not mention to Montana that taxiway Y also was open. (Tr. 874, 881, 883, 885–86, 901.) Because he was only told about runways 4L and 22R being opened, Montana believed that taxiway Y was still closed. (Tr. 881, 883, 885–86.)

At around 11:00 p.m. on June 8, 2009, Ragnauth escorted the Tully work crew and three Covenant ASA vans to the staging area to await the closure of runways 4L and 22R. (Tr. 509, 640–42, 858–62; DX H at 5, 7–8, 25, 47.) The convoy drove across taxiway Y to access the staging area. (Tr. 655–56; *see* PX 16 MCL.) As they waited for the runway closures, Tully

⁸ At least one ASA, DeGracia, did not recall having been assigned to the Project site before the night of the accident, and did not know that the taxiway had been closed for some time. (Tr. 211.)

personnel worked within the low-mass barriers to prepare equipment and begin moving materials northwest toward the construction area. (Tr. 730–31, 862, 870.)

McLean was assigned to operate a green and orange boom truck for the night, which was about 25 feet long and over 14 feet tall. (Stip. Facts ¶ 1, 8; PXs 39a–e, 40; DX F–5b; Tr. 636, 723–24.) Since the boom truck was not required for Tully's closure preparations, McLean drove the Truck toward the perimeter of the staging area to create room for other workers to maneuver equipment and vehicles. (Tr. 646–47, 870.) McLean parked the Truck within the low mass barriers approximately 430 feet south of a slight bend in taxiway Y south of runway 31R. (Tr. 172–73, 175–76, 664, 1632.) The Truck was positioned perpendicular to and facing away from taxiway Y, with the rear approximately 68 feet west of the taxiway centerline. (Tr. 559–60, 651, 653, 656–659, 869, 1348–49; PXs 13, 16 MCL, 32.) After McLean parked, Montana directed McLean to remain in his position until further instructions, and warned him not to move beyond the low–mass barrier enclosure. (Tr. 648, 671–72, 868–71, 881–82.)

McLean remained parked in the same spot for approximately 35 to 45 minutes before the accident. (Tr. 539–40, 659; DX H at 6, 31, 42.) In that time, no one told McLean to move the Truck. (Tr. 672.) As he waited, McLean worked on a personal project on his laptop, which Tully permitted him to do during his frequent "downtime" at construction sites. (Tr. 665–66, 683, 694–95.)

At approximately 11:33 p.m., Ragnauth informed Montana that runways 4L and 22R were closed and that work could begin at the construction area. (DX H at 23, 45, 47.) The rest of the Tully crew proceeded to the construction area while McLean remained in the staging area.

⁹ The construction area, which was near the intersection of runways 4L-22R and 13L-31R, was separate, and at a distance, from the staging area, which was located on the western edge of taxiway Y. (Tr. 750, 857, 861–62, 884–85, 960; *see* PX 16.)

(Tr. 864–66; DX H at 5–6.) After the runways 4L and 22R closures were in effect, Montana drove his work van on the shoulder of taxiway Y. (Tr. 867–68, 885, 898.) Another Tully worker was also using a payloader to bring piping from the staging area to the construction area. (Tr. 895, 898.)

McLean had been working for Tully at JFK for about three months prior to the accident. (Tr. 633.) He had been assigned to work as a truck driver at the Project site for about 30 days, and in that time routinely parked the Truck in a similar location adjacent to taxiway Y to create room for other vehicles and workers. (Tr. 645–49; DX H at 6.) Based on a job orientation McLean had received from Tully, McLean understood that he could move safely and freely within the low–mass barriers, but needed an escort to leave the area. (Tr. 644–45, 664–65, 667–68, 675.) McLean was not informed that there was any restriction as to where he could position the Truck within the enclosure. (Tr. 644–45.) During the time McLean worked at the Project site, McLean never saw a plane on taxiway Y. (Tr. 663.)

McLean did not illuminate any of the Truck's external lights while he was parked in the staging area on the night of the accident. (Tr. 166–68.) McLean turned the Truck's engine and headlights off. (Stip. Facts. ¶¶ 9, 10; Tr. 167–68, 515, 660, 712.) The Truck's roof—mounted, rotating amber flashing beacon light, which can be seen 500 feet away when illuminated, was also off. (Tr. 167–68, 1245; *see* Tr. 1871.) Although McLean switched the beacon light toggle to the "on" position, he neglected to turn the ignition by one notch as necessary to illuminate the beacon light. (Tr. 167–68, 663, 714, 719–21, 1165–66, 1171–72; DX H at 11.) No one spoke to McLean about activating the Truck's headlights or beacon light on the night of the accident or during the prior 30 days, when he had followed the same procedure at the Project site. (Tr. 540, 663.)

The area where McLean parked on the night of the accident was dim. Although Tully had set up ten-foot "tower lights" to illuminate the staging area, they did not cast light on the area by taxiway Y where McLean was parked. (Tr. 131, 660, 725–26, 871–72, 888, 894–95, 1154–55; DX H at 2.) The sky at the time of the accident was overcast, with visibility of 10 miles under the cloud cover at approximately 500 feet, which obscured the moon and stars. (DX H at 2; Tr. 270, 441, 659, 1062, 1254, 1355–56, 1874.)

The Covenant ASAs assigned to work at the Project were responsible, among other things, for inspecting Tully vehicles before entering the security access gate; escorting Tully personnel to the Project site; monitoring Tully personnel within an enclosure; and reporting if any personnel breached the enclosure, or if anything "unusual was happening" that may have posed a security issue. (Tr. 116, 507, 1007–11, 1031–33, 1035–37, 1040–41, 1044, 1047–48; see DX G at CAS 0033–34.)¹⁰ Covenant instructed its ASAs that if they observed personnel potentially breaching an enclosure barrier, the ASA's responsibility was to report the breach to Covenant superiors, who would relay the issue to Port Authority. (Tr. 1014–16, 1031–33.) The ASAs were equipped with radios to connect to the Covenant supervisor or administrative office, but not directly to Port Authority or construction contractor personnel. (Tr. 165.)

ASA Warner was tasked with observing McLean on the night of the accident. (Tr. 508, 555, 1007–09.) Warner positioned his van parallel to taxiway Y facing north, approximately 40 to 50 feet southwest of McLean's truck. (Tr. 507–08, 518–19; 546, 669–70; DX B–2.)¹¹

¹⁰ Covenant provided ASAs with a "breach of rules" pad to issue tickets to airport employees on the premises who breached a Port Authority rule or regulation. There is no evidence, however, that ASAs could issue tickets to Tully employees. (Tr. 537, 545; *see* DX J at CAS 1124–25.)

¹¹ Warner had moved his vehicle several times within that area that night to obtain a better view of the Project site. (Tr. 533–34.) At one point, Warner's van may have been within 10 or 15 feet of McLean's truck. (Tr. 662, 669; *see* Tr. 714–15.)

Warner had his van headlights and beacon light on. (Tr. 508, 519, 660–62, 719, 888–89.) Warner estimated that he could see about 30 feet ahead with his headlights. (Tr. 519.) From Warner's vantage point, he was able to see the Truck through the right passenger window and right windshield, as well as "mountains of dirt," debris, and asphalt paving materials. (Tr. 518–20, 550, 565.) McLean also observed Warner's van from where he was parked. (Tr. 660–61.)

Warner was concerned that the low-mass barriers, which he believed represented the perimeter of the Project site, and McLean's truck were situated too close to taxiway Y. (Tr. 531–32, 541, 560.) Warner believed that another line of barriers, such as cones, was required within the low-mass barriers to mark where Tully personnel were permitted. (Tr. 570–71, 579.) Before the accident, Warner expressed his concern about the placement of the Truck to a Port Authority supervisor, who "okayed everything." (Tr. 541, 551–53, 567.) Warner did not recall whether he also communicated with a Covenant supervisor about the position of McLean's vehicle and the low-mass barriers. (Tr. 554.)

ASA DeGracia saw McLean's truck prior to the accident and believed that the back wheels of the Truck extended "just past" the low-mass barriers. (Tr. 166, 172–76, 209–10.) DeGracia did not report the Truck's position to Covenant or Port Authority because he did not think it posed a safety concern, but indicated that he might have reported the Truck had a Port Authority representative returned to the Project site. (Tr. 180.) DeGracia may have discussed the Truck's position and lack of external lighting with Warner. (Tr. 171, 176–77; *but see* Tr. 556–57.)

After the contractors began work at the construction area, Ragnauth drove around the Project site to ensure that people were not positioned in any taxiway or "unsafe" area. (Tr. 750,

Ragnauth observed one Covenant ASA on runway 31R and taxiway Y, informed the ASA that taxiway Y was open, and asked him to move to a safe location. (Tr. 750; DX Y-2a.)¹³ Ragnauth also drove north on taxiway Y and observed Warner's van, but did not recall seeing a parked truck near taxiway Y. (Tr. 762–63, 766, 773–74, 780–81; DX Y-2a.) Based on his experience, Ragnauth believed that Warner's vehicle was far enough from the double yellow taxiway edge line to be safe from aircraft traffic. Ragnauth acknowledged, however, that there was nothing on the taxiway to indicate where personnel could park safely, and that he was not familiar with the term "Object Free Area." (Tr. 779–81.)

The KAL aircraft landed at JFK shortly after midnight on June 9, 2009. (Stip. Facts ¶ 4; DX H at 5.) The KAL flight crew consisted of Captain Latulori Toisuta ("Toisuta") and First Officer Seung Jung Yoon ("Yoon"). (Stip. Facts ¶ 5.) The body and wingspan of the Aircraft measured 211 feet and 5 inches across at its widest point. (DX H at 3.) Its right wing extended approximately 106 feet from the center of the plane body. (PXs 13, 32.) The outer engine was suspended from the right wing 68 feet from the center of the plane, and 84 feet behind the plane's cockpit. (PX 13; DX H at 3.) There was approximately 6.25 feet of ground clearance to the bottom of the right outer engine. (PX 13.)

After landing, the ATC directed the KAL pilots to proceed to taxiway Y, and to cross runway 31R to continue on taxiway Y in a southwesterly direction. (DXs A-2, ¹⁴ H at 6; Tr. 403-05, 1074-75.) The flight crew complied with these instructions and proceeded along the

¹² Ragnauth testified that he had no duty to conduct the drive—around. (Tr. 773.)

¹³ Ragnauth moved the ASA to an area past a "hold bar" sign, which indicates a location beyond a runway or taxiway intersection where it is safe for an aircraft to wait for the passage of aircraft traffic. (Tr. 777–79, 786–88.)

¹⁴ DX A-2 and PX 25 both refer to the cockpit voice recording.

centerline of taxiway Y at a speed of between 11 and 13 knots per hour, which equates to 19 feet and 22 feet traveled per second, respectively. (Stip. Facts ¶ 7; DXs F-5c, F-5d; Tr. 1600.)

As pointed out in a NOTAM that the pilots reviewed before the flight, the centerline lights of taxiway Y were not illuminated. (Tr. 1055–56, 1073, 1075; DX D–5 at KAL001358.) The flight crew used runway turnoff lights and inboard landing lights to illuminate the Aircraft's path as they proceeded down the taxiway. (Tr. 104, 229–30, 311, 1845–46.) The inboard landing lights were powerful lights that projected straight ahead of the Aircraft. (Tr. 1786, 1846, 1848–49.) The runway turnoff lights, which were designed to light turning areas, illuminated an area about 65 degrees to the left and right of the plane's path, including the shoulder area of taxiway Y. (Tr. 312, 1851–52.) Both the inboard and turnoff lights were located on the nose landing gear of the plane, about four to five feet above the ground. (Tr. 1845–46; DX I–6b.)

Captain Toisuta, who was steering the Aircraft, did not observe any artificial lighting other than the Aircraft's external lights. (Tr. 1063.) Captain Toisuta saw unlit low mass barriers, which he understood as a sign that there was work in progress during the daytime. (Tr. 111–12, 215–16, 1058, 1077.) Captain Toisuta did not, however, observe any vehicles in the vicinity of taxiway Y. (Tr. 220–21, 1074–75.) As the KAL plane approached taxiway Y, its lights illuminated the area where McLean and Warner were parked. (Tr. 537, 562, 569, 666–67). McLean noticed bright lights through the passenger window of the Truck. (Stip. Facts ¶ 11; Tr. 666–67, 691–92.) The light from the Aircraft's nose wheel blinded those on the ground, such that it was difficult for McLean to look directly at the source and for Warner to view what was happening in the immediate vicinity of the Aircraft. (Tr. 562–64, 569, 666.) There is no evidence that McLean saw, or had the opportunity to see, the outer engine hanging down from the Aircraft's right wing. (*See* DX H at 6; Tr. 666–69, 691–95.)

McLean did not move the Truck from the time the Aircraft entered taxiway Y until the collision. (Stip. Facts ¶ 12.) McLean explained at trial:

When I first saw the lights coming, I had no inclination that the plane that it turned out to be would be coming down my location because there's always planes in the vicinity. I know that where we're working there's not supposed to be any plane landing, taxiing or taking off within the area where we work. So, when I saw it, I dismissed the idea of it. I heard the noise but there were other planes in the general area also so I also heard other plane engines going so I did not pay any specific attention to the fact that the lights from the plane lit me up for a minute or so. I just forgot about it and went back to what I was doing.

(Tr. 667–68.) McLean further testified that when he observed that the Aircraft may have been moving in his general direction, he turned to look for Warner's van, and seeing that Warner was still parked in the vicinity, McLean "dismissed the idea of the plane" and returned his attention to his laptop. (Tr. 665–69, 686.)¹⁵

Warner testified to seeing the oncoming Aircraft from a few hundred yards away, but did not think it was necessary to act since there are always planes around an airport. (Tr. 527–28, 531; *see* DX B–2.) As the Aircraft proceeded south on taxiway Y, it appeared to Warner that either the outer jet or the wingtip of the Aircraft was likely to collide with the Truck. (Tr. 562, 566.) Warner, however, did not call or radio anyone about this issue. (Tr. 569.) There is no evidence that anyone told McLean to move his Truck as the plane proceeded on taxiway Y.

As the plane taxied, First Officer Yoon communicated with ATC, and verified instructions, using a JFK taxiway diagram, to assist Toisuta in guiding the Aircraft along the proper route. (Tr. 272, 1780–82.) Yoon observed McLean's truck at least once before the

14

¹⁵ Although there was some evidence that McLean may have believed that the Aircraft engine would pass over him (Tr. 687–89, 701–04, 1188), the Court credits McLean's testimony that he believed that he was not in the path of the Aircraft based on his experience that the taxiway was closed during Tully's work at the Project site and the proximity of Warner's van (Tr. 665–69, 686, 701, 704).

collision. (Tr. 284–85, 334–35, 498–99.) Yoon first saw the Truck 30 to 80 degrees ahead and to the right of the Aircraft. (Tr. 296–97.) He also recalled that the plane's lights illuminated the vehicle. (Tr. 498–99.) He did not recall, however, maintaining focus on the Truck after his initial observation. (Tr. 289–90.) Yoon estimated that the Truck was approximately 50 to 100 feet beyond the tip of the right wing, but not "very far from the tip of the wing." (Tr. 310–11, 492; *see* DX H–1b.)¹⁶ Yoon did not, however, inform Toisuta that he perceived the Truck or tell Toisuta to stop the Aircraft until after the collision. (DX A–2; Tr. 109–10, 311, 1075–76.) The cockpit voice recording reflects the following exchange seconds before the collision:

Oh.
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1:17:00 Yoon: Oh wow.

1:17:01 Toisuta: Yes?

1:17:02–1:17:03 Yoon: Oh this car . . .

1:17:04 Yoon: Oh.

1:17:07 [vibration]

Yoon: OH!

1:17:08 Toisuta: Huh? What is it?

1:17:09 Toisuta: What is it?

1:17:09–1:17:10 Yoon: Stop stop!

1:17:11 Yoon: Ah oh my god!

1:17:12 Toisuta: What is it?

¹⁶ Yoon testified that the object was more than the length of the courtroom away from the wingtip, but not more than double the length of the courtroom. (Tr. 492.) Following trial, Court staff measured approximately 51 feet from the witness stand to the back wall of the courtroom.

	1:17:24-1:17:34	Yoon: Korean Air 257 ground, we think we uh, uh hit the ground	
		vehicle, [incomprehensible] the truck, nearby the taxiway.	
	1:17:35-1:17:36	ATC: I'm sorry, you think you hit the vehicle?	
	1:17:37-1:17:38	Yoon: Yes.	
	1:27:24-1:25:29	Toisuta: A truck, or what kind of vehicle did you see?	
	1:27:33	Yoon: I, well	
		[ATC]	
	1:27:35-1:27:37	Yoon: seemed to be like a truck, or something.	
(DX	$(4-2.)^{17}$		

The Aircraft's outer right engine struck the top rear right corner of the Truck, toppling it on its side and damaging the Aircraft's engine. (DXs H at 2, 6 & 55, X–2; PXs 8, 11, 12, 18.) Toisuta "immediately" stopped the Aircraft after feeling a vibration and after Yoon told him to stop. (Tr. 104–05, 109 ("we felt there was a vibration and then my co–pilot would say 'stop, stop,' and he would also—he also said there was a vehicle so I stopped the aircraft"), 1076 (Toisuta stating that he stopped the Aircraft "[a]fter we felt a vibration and copilot said something that made me stop"); *see id.* at 1806–07 (pilot could have braked within one second or less)). The Aircraft traveled approximately 116 feet after the impact with the Truck before coming to a halt. (PX 13; DX H at 6; Tr. 1603–04, 1608–09.)

¹⁷ The times indicated on the cockpit voice recording transcript set forth above are based on the Court's review of the recording after trial and differ from the times reflected on the trial transcript. (*See* Tr. 1741.)

¹⁸ Although KAL's accident reconstruction expert concluded, based on Toisuta's testimony, that Toisuta stopped the Aircraft immediately after feeling the vibration, the Court finds that there

McLean felt the impact of the collision, but has no recollection of what occurred after the impact. (Tr. 668.) Although Warner observed the Aircraft on its entire path, he did not see the collision because the lights "blind[ed] everything in that area." (Tr. 562–63.) Upon hearing the impact, Montana climbed out of an excavation trench, and from the construction area, saw McLean on the ground. (Tr. 876, 887.) DeGracia was able to see the overturned Truck and McLean staggering from the Truck from his position about 300 feet away. (Tr. 127–29.) Ragnauth reported that immediately after the collision, he saw someone running away from the Aircraft and then falling to the ground. (DX H at 24, 45.)

CONCLUSIONS OF LAW

I. Jurisdiction and Applicable Law

The Court has jurisdiction over this claim pursuant to 28 U.S.C. § 1332(a)(2). At the time of the accident and at the time this action was instituted, McLean was a citizen of New York, and Defendant was a citizen of the Republic of Korea. (Dkt. 1 ¶¶ 2, 10.)

New York state law applies to this action because a federal court sitting in diversity applies the law of the forum state, and the tort occurred in New York. *Klaxon v. Stentor Elec. Mfg. Co.*, 313 U.S. 487, 496 (1941); *Erie R. Co. v. Tompkins*, 304 U.S. 64, 80 (1938); *Krock v. Lipsay*, 97 F.3d 640, 645 (2d Cir. 1996).

II. Negligence Standard

Absent a controlling statute, the rules of law applicable to torts generally govern in a case involving the collision of an airplane and a land vehicle. *Read v. New York City Airport*, 259 N.Y.S. 245, 246 (Mun. Ct. 1932) (negligence action to recover damages resulting from the collision between a plane and a truck at the New York City Airport); *see, e.g., Craig Test Boring*

was a few-second delay between the KAL plane hitting the Truck and the Aircraft coming to a stop. (Tr. 1723, 1736.)

Co. v. Saudi Arabian Airlines Corp., 138 F. Supp. 2d 553, 557 (S.D.N.Y. 2001) (negligence action for damages arising from collision between an aircraft and a drilling rig).

To prevail on a negligence claim under New York law, a plaintiff must satisfy three elements by a preponderance of the evidence: "(i) a duty owed to the plaintiff by the defendant; (ii) breach of that duty; and (iii) injury substantially caused by that breach." *Lombard v. Booz–Allen & Hamilton, Inc.*, 280 F.3d 209, 215 (2d Cir. 2002).

The court determines the duty of care owed by one member of society to another as a matter of law. *Craig Test Boring*, 138 F. Supp. 2d at 557; *Palka v. Servicemaster Mgmt. Servs. Corp.*, 634 N.E.2d 189, 193 (N.Y. 1994) (the existence and extent of a defendant's duty to a given plaintiff "is usually a legal, policy—laden declaration reserved for Judges to make prior to submitting anything to fact—finding or jury consideration"). The standard is a practical one:

[W]henever one person is by circumstances placed in such a position with regard to another that everyone of ordinary sense . . . would at once recognize that if he did not use ordinary care and skill in his own conduct with regard to the circumstances[,] he would cause danger of injury to the person or property of the other[,] a duty arises to use ordinary care and skill to avoid such danger.

Havas v. Victory Paper Stock Co., 402 N.E.2d 1136, 1138 (N.Y. 1980) (quoting Heaven v. Prender, 11 Q.B.D. 503, 509 (1883)).

A defendant is negligent when he breaches the duty of care imposed by law by engaging in conduct that poses an unreasonable risk of harm to others. *Craig Test Boring*, 138 F. Supp. 2d at 557. The primary factors to be taken into account in assessing the reasonableness of a defendant's conduct are "the foreseeable likelihood that it will result in harm, the foreseeable severity of the harm that may ensue, and the burden that would be borne by the actor and others if the actor takes precautions that eliminate or reduce the possibility of harm." *Palka*, 634 N.E.2d at 193 (N.Y. 1994).

Evidence of customary procedures and practices may reflect on the reasonableness of a defendant's behavior. *Gunther v. Airtran Holdings, Inc.*, 05 CV 2134, 2007 WL 193592, at *3 (S.D.N.Y. Jan. 24, 2007); *see Cruz v. New York City Transit Auth.*, 526 N.Y.S.2d 827, 829 (App. Div. 1988) ("Proof of a generally accepted practice, custom or usage within a particular trade or industry is admissible as tending to establish a standard of care, and proof of a departure from that general custom or usage may constitute evidence of negligence."). *Cf. Abraham v. Port Auth. of New York & New Jersey*, 815 N.Y.S.2d 38, 40 (App. Div. 2006) ("internal rules and manuals, to the extent they impose a higher standard of care than is imposed by law, are inadmissible to establish a failure to exercise reasonable care").

The third element of a negligence claim under New York law is "proximate cause." *Craig Test Boring*, 138 F. Supp. 2d at 557. To satisfy this element, a plaintiff must establish that the defendant's negligence was a substantial foreseeable factor in bringing about the plaintiff's injury. "The existence of a duty alone and 'the mere happening of an accident [do] not establish liability on the part of a defendant[;] . . . [rather], plaintiff [is] required to connect her injury to a breach of duty by defendant and to show that defendant's acts were a substantial cause of the events which produced the injury." *Gunther*, 2007 WL 193592, at *9 (quoting *Foley v. Golub Corp.*, 676 N.Y.S.2d 308, 310 (App. Div. 1998)) (internal brackets and alterations in *Gunther*).

III. Comparative Negligence Standard

When two or more of the parties have contributed to an accident, New York law applies a comparative negligence standard. *Craig Test Boring*, 138 F. Supp. 2d at 558. New York does not apply the "last clear chance" rule:

[R]egardless of which party had the last clear chance to avoid that accident, "liability for such damage is to be allocated among the parties proportionately to the comparative degree of their fault, and that liability for such damages is to be

allocated equally only when the parties are equally at fault or when it is not possible fairly to measure the comparative degree of their fault."

Prudential Lines, Inc. v. McAllister Bros., Inc., 801 F.2d 616, 621 (2d Cir.1986) (quoting United States v. Reliable Transfer Co., 421 U.S. 397, 411 (1975)). 19

McLean bears the burden of proving, by a preponderance of the evidence, KAL's negligence and that KAL's negligence was a substantial foreseeable factor in causing the accident. *See Kane v. United States*, 189 F. Supp. 2d 40, 52 (S.D.N.Y. 2002). Once liability is established, it is KAL's burden to establish the equitable shares of fault attributable to the plaintiff, settling defendants, co-defendants, or non-parties for purposes of reducing KAL's amount of responsibility for damages. *Zalinka v. Owens-Corning Fiberglass Corp.*, 633 N.Y.S.2d 884 (App. Div. 1995); *Gerdik v. Van Ess*, 774 N.Y.S.2d 174 (App. Div. 2004).

McLean asserts that the KAL flight crew and Tully were negligent and that KAL's negligence was the sole proximate cause of McLean's injuries. (Dkt. 206 ¶¶ 171–73, 175.) McLean further contends that he, Port Authority, Covenant, and the FAA were not negligent. (Id. ¶¶ 174, 176, 177–85.) KAL maintains that McLean's negligence was the sole proximate

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¹⁹ Hence, the "last clear chance" doctrine, which under certain circumstances allowed complete recovery by a plaintiff who otherwise would have been barred by his contributory negligence, became obsolete upon the adoption of the doctrine of comparative negligence in New York. *Romeo v. DeGennaro*, 680 N.Y.S.2d 235, 236 (App. Div. 1998).

²⁰ Contrary to KAL's unsupported contention (Dkt. 207 ¶ 27), McLean may rely on any evidence introduced at trial, regardless of the party who offered the evidence, to satisfy his burden of proof. *See Sawyer v. United States*, 297 F. Supp. 324, 330–31 (E.D.N.Y. 1969) ("It is hornbook law that evidence coming from witnesses on the opposite side (as well as from its own witnesses) is available to any party to a law suit.' [T]his Court is going to use the testimony adduced by all of the parties in determining the liability, if any, of the defendant. This is also the applicable law in New York." (citing, *e.g.*, *Alpine Forwarding Co. v. Pennsylvania R. Co.*, 60 F.2d 734 (2d Cir. 1932)); *Tumulty v. N.Y.*, *N.H. and H.R. Co.*, 229 N.Y.S. 700, 705 (App. Div. 1928) (holding that a plaintiff is entitled to take advantage of evidence of negligence offered by a defendant's witnesses).

cause of the accident. (Dkt. 207 ¶¶ 79–104.) Alternatively, KAL contends that the negligence of Covenant and Port Authority were contributing causes of the accident. (*Id.* ¶¶ 105–151.)

IV. Liability

The Court now examines the issues of KAL's alleged negligence and the comparative fault of each party that may have contributed to the collision.

A. KAL's Liability

New York law imposed a duty on KAL's flight crew members Toisuta and Yoon to use ordinary care and skill in operating the Aircraft on the night of the collision. See Craig Test Boring, 138 F. Supp. 2d at 557; Read, 259 N.Y.S. at 247. Federal aviation regulations provide that "[t]he pilot in command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft." 14 C.F.R. § 91.3(a). KAL's Flight Operations Manual similarly provides that Toisuta as the pilot in command "has final responsibility and authority for the safe operation of the aircraft" (PX 24 at 3.2.1), and that Yoon as the first officer was responsible for assisting the captain "in the safe and efficient operation of the aircraft" and "immediately informing the captain of unsafe conditions or improper handling which could place the aircraft in jeopardy" (id. at 3.2.2). Federal aviation regulations also prohibit "operat[ing] an aircraft in a careless or reckless manner so as to endanger the life or property of another." 14 C.F.R. § 91.13(b). Pilots must maintain a sharp lookout so as to "see and avoid" other aircraft. 14 C.F.R. § 91.67(a); see Read, 259 N.Y.S. at 246 (a pilot, taxiing a plane down a runway after giving a 'casual' glance down the field, was contributorily negligent for not having a sufficient lookout).

Applying these standards of care to the events of June 9, 2009, the Court finds that Yoon breached his duty to exercise ordinary care and skill in operating the KAL aircraft on the night of

the accident. The evidence at trial established that Yoon observed McLean's truck close to the taxiway prior to the collision at least once, when it became illuminated by the plane lights, yet failed to alert Toisuta about a possible object in the plane's path. (DXs A-2 at 1:17:02-1:17:03 ("Oh this car . . ."), 1:17:24-1:17:34 ("we think we . . . hit the ground vehicle, [] the truck, nearby the taxiway"), H1-b; Tr. 284-85, 296-97, 334-35, 498-99). While the lighting conditions made it difficult for Yoon to judge the exact position of the Truck, he estimated that the Truck was not "very far" or no further than 50-100 feet, beyond the tip of the right wing. (Tr. 310-11, 492.) Under these circumstances, it was unreasonable for Yoon not to have notified Toisuta about his observation of a vehicle that was so close to the plane's wing, or not to have stopped the plane himself. 22

The standard of care required Yoon to make a determination of whether the Truck would fall within the wingspan of the Aircraft, and if so, to alert the pilot and stop the Aircraft. (*See* Tr. 79–80, 242, 244–45, 280–81, 1802, 1819–20, 1830, 1854.) If Yoon had any doubt that the Aircraft could pass the Truck safely, he was obligated to tell Toisuta to stop, or stop the plane himself, and investigate further. (Tr. 244, 280, 496, 1829–30.) As Yoon acknowledged at trial, KAL's Flight Operations Manual provides that:

While taxi[i]ng in close proximity to . . . ground equipment, all crewmembers will maintain extreme vigilance to prevent ground mishaps. If there is *any doubt* about clearance from . . . ground equipment, the captain must stop the aircraft and obtain ground assistance.

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²¹ The Court gives little weight to the opinion of KAL's expert that the KAL pilots could not have avoided the accident because the expert assumed that Yoon did not, or could not, see the Truck prior to the collision (Tr. 1856, 1859), and did not consider Yoon's testimony that the Truck was illuminated by the plane's lights (Tr. 1852–53).

²² Because of the dual-braking system on the KAL plane, both Toisuta and Yoon had the ability to stop the plane. (Stip. Facts ¶ 13; Tr. 1722–23, 1805–06.)

(PX 24 at 6.9.1 "Taxi–In" (emphasis added); *see also id.* at 6.2.6 "Taxi Considerations" ("If there is any doubt about clearance from . . . equipment, *the flight crew* must stop the aircraft" (emphasis added)); Tr. 279–80, 1829.) It is "extremely rare" for a pilot to have to judge whether an object is potentially in the wing span. (Tr. 1802, 1855–56.)

While much was made at trial about the dark lighting conditions near taxiway Y at the time of the accident, the relevance of this fact is substantially undercut by Yoon's admissions buttressed by the cockpit recorder — that he actually saw the Truck before the collision and that he perceived the Truck to be only 50–100 feet past the tip of the Aircraft's right wing. Indeed, if anything, the darkness around taxiway Y should have prompted Yoon to be even more vigilant, given the potential for obstructions to be in the Aircraft's path that would be difficult to perceive. (Tr. 1482, 1495–97, 1503, 1540–41, 1822, 1857.) FAA Advisory Circular 120–74A, which applies to flight crew procedures during taxi operations, requires that each crewmember must be "continually aware of . . . ground vehicles" and that "[d]uring low visibility taxi operations, additional vigilance is absolutely essential." (DX A-3 at 15; Tr. 342-43.) Youn also should have been aware that his ability to assess the distance of the Truck may have been impaired if he used cockpit lights to consult airport charts. (Tr. 1484-85, 1533, 1785-86.) Further, Yoon should have taken heed from the illuminated beacon light on Warner's van, which would have been visible from the cockpit, that there might be vehicles close to the taxiway. (Tr. 508, 519, 660-62, 719, 888-89, 1245, 1800, 1802, 1871.) 23

Under these circumstances, having perceived a parked ground vehicle in the dark near the taxiway that he believed was in close proximity to the Aircraft's wingtip, it was unreasonable for

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²³ The Court notes that KAL's expert testimony regarding Yoon's ability to recognize the Truck as a hazard assumed that the Truck was beyond the beam of the plane's lights, and did not consider Yoon's admission that the Aircraft's external lights illuminated the Truck. (Tr. 1541.)

Yoon, at a minimum, not to inform Toisuta or tell him to stop the plane, or not to stop the plane himself. A reasonable person in Yoon's position would have recognized that observing an unlit parked vehicle within the vicinity of the Aircraft's wingspan was an anomalous situation²⁴ and that the Aircraft should be stopped to allow the flight crew to determine whether there was sufficient clearance for the Aircraft to safely pass the vehicle.²⁵ Instead, Yoon permitted the Aircraft to continue course without informing Toisuta of his observation or stopping the Aircraft himself. (DX A–2; Tr. 109–10, 311, 1075–76.) This was a breach of his duty to use ordinary care. *See Craig Test Boring Co.*, 138 F. Supp. 2d at 558–59 (pilot breached duty to use ordinary care by failing to stop a plane and inquire with ground control after observing a rig on the median of the taxiway).

The Court also finds that there was sufficient time after Yoon saw the Truck to stop the Aircraft and avoid the accident. KAL's own accident reconstruction expert opined that the Aircraft could have been stopped before hitting the Truck had one of the pilots braked within one second of Yoon saying "Oh this car." (Tr. 1608–10, 1621, 1629–30.) Furthermore, the evidence

The Court is mindful that pilots generally proceed with an expectation that they will not encounter obstructions in their path when the tower controller directs them to proceed, and that an airport operator is required to maintain an area free of obstacles to allow the aircraft to proceed in safety. (Tr. 392, 1505–06, 1786–88.) However, these expectations do not relieve pilots of their obligation to keep a vigilant eye out for unexpected obstacles as they taxi their aircraft. (Tr. 100–01, 272, 280–82, 315, 460, 1855–56.)

The Court rejects KAL's contention that McLean was required to present pilot testimony that a reasonable pilot under the circumstances would have made a more accurate estimate of the Truck's distance from the Aircraft. (*See* Dkt. 207 ¶ 56.) As the Court indicated when denying KAL's oral motion for a directed verdict, McLean was not required to present expert testimony to establish the duty of care applicable to the KAL pilots as they proceeded down the taxiway because the primary factual disputes in this case concern visibility at the time of the accident and credibility of witnesses as to what occurred—all issues that can be determined by a lay factfinder without the aid of expert testimony. (Tr. 929–33 (citing, *e.g.*, *Read*, 259 N.Y.S. at 246 (in case involving airplane collision with a parked truck while taxiing down a runway, court applied general negligence and duty of care standard and did not resort to expert testimony to determine the applicable duty of care)).)

establishes that there was additional time for the Aircraft to stop short of the Truck beyond the one second calculated by KAL's expert. KAL's expert assumed that Yoon did not see the vehicle until stating "Oh this car." (Tr. 1601, 1614, 1626, 1743–44, 1750.) However, three seconds before stating, "Oh this car," Yoon uttered a dubious—sounding "Oh," which prompted Toisuta to ask "Yes?" The Court finds that this was the moment when Yoon first saw the Truck or thought he saw it. This was eight seconds before the vibration of the impact between the plane and the Truck, which adds three seconds in which Toisuta or Yoon could have braked and avoided the collision. (DX A–2 ("Oh" at 1:16:59 and vibration at 1:17:07); Tr. 1739, 1745.)

KAL's expert determined that the Aircraft required 94 feet of stopping distance after Toisuta applied the brakes, based on his assumption that Toisuta applied the brakes within one second of impact and subtracting 22 feet (the distance traveled in one second at a speed of 13 knots per hour) from the 116 feet the Aircraft actually traveled after the point of impact. (Tr. 1605, 1609–10, 1615, 1628–30, 1733). The assumption that Toisuta braked within one second of the impact was, in turn, based on information from the digital flight data recorder indicating that the plane's velocity decreased after the vibration. However, as KAL's expert conceded, that there is no definitive information on when Toisuta applied the brakes, and the decreased speed could be due to the impact itself. (Tr. 1627, 1730.) Based on the previously discussed testimony and the cockpit recorder data, the Court finds that Toisuta did not brake until after Yoon told him to stop, which was about two to three seconds after impact. (DX A–2 at 1:17:07–1:17:10; Tr. 104–05, 109–10, 311, 1075–76.) This finding undermines KAL's expert opinion that the

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²⁶ KAL's expert acknowledged that there was no conclusive information available regarding the Aircraft's braking capacity. (Tr. 1628.)

Aircraft required 94 feet of stopping distance after Toisuta applied the brakes, and instead suggests that the Aircraft traveled a much shorter distance before coming to a halt.

KAL's expert also conceded that his conclusion rested on further assumptions including how much pressure Toisuta applied (Tr. 1607, 1730–31, 1734) and the absolute speed of the Aircraft at the time of impact (Tr. 1619). Thus, although KAL's expert calculated 94 feet of stopping distance by subtracting the 22 feet that the Aircraft would have traveled at 13 knots, the digital flight data recorder indicated that the Aircraft was also traveling as slowly as 11 knots, or 19 feet per second. (Tr. 1600.) Based on all of the foregoing facts and variables, either unaccounted for by KAL's experts or unascertainable, the Court finds that Toisuta or Yoon could have brought the KAL aircraft to a stop in less time and distance than KAL's expert opined.

In sum, the Court finds that KAL's flight crew failed to exercise reasonable care by not stopping the Aircraft immediately upon Yoon's observation of the Truck within what he believed to be close range of the Aircraft's right wingtip. The Court further finds that the KAL pilots had sufficient time to avoid the accident after Yoon saw the Truck. Accordingly, the Court finds that KAL was negligent and that its negligence was a proximate cause of the accident.

The Court having found that KAL's breach of its duty to operate its aircraft with reasonable care was a cause of the accident, the burden now shifts to KAL to prove contributory negligence by McLean and/or other parties.

B. Contributory Negligence of Others

Under New York's pure comparative negligence scheme, there can be more than one proximate cause of an accident. *See Saint v. United States*, 483 F. Supp. 2d 267, 279–83 (E.D.N.Y. 2007); *Caraballo v. United States*, 830 F.2d 19, 22 (2d Cir. 1987).

1. McLean

A plaintiff's culpable conduct will not bar recovery in a negligence action, but diminishes it proportionally. N.Y. C.P.L.R. § 1411; *see Whalen v. Kawasaki Motors Corp.*, 703 N.E.2d 246, 248 (N.Y. 1998). A defendant bears the burden of proving contributory negligence on the part of the plaintiff by a preponderance of the evidence. *Kane*, 189 F. Supp. 2d at 52 (citation omitted).

Based on its review and assessment of the evidence introduced at trial, the Court finds, by a preponderance, that McLean was not negligent for parking the Truck on the shoulder of taxiway Y. McLean reasonably relied on the instructions he received from his employer, Tully, to park within the perimeter of the low-mass barrier and to remain there until further instruction. (Tr. 648, 671–72, 868–71, 881–82.) In light of these instructions, it was reasonable for McLean to believe that he was safe so long as he remained within the low-mass barriers, and that these barriers demarcated a construction area within which Tully workers could be safely located and operate. McLean's understanding was corroborated by Tully supervisors Davi and Montana, who testified to their expectation that the Tully work crew could work safely anywhere within the low-mass barriers. (Tr. 872–73, 964.) Since a person of ordinary sense would rely on their employer to guide their conduct at a workplace, McLean should not be faulted for his employer's ignorance of the airport's rules and procedures or its failure to provide guidance or direction to its employees on these rules, such as staying out of the OFA when a taxiway becomes live. ²⁷

The reasonableness of McLean's (albeit mistaken) belief was further reinforced by the fact that McLean had parked in the same construction staging area for 30 days prior to the

KAL asserts that the failure to comply with applicable FAA and Port Authority rules regarding the operation of vehicles at JFK by parking in the OFA constituted negligence *per se*. (Dkt. 207 ¶¶ 10, 104.) However, noncompliance with such rules constitutes only "some evidence" of negligence that may be admissible to aid in formulating the standard of care. *See In re Air Crash Disaster at John F. Kennedy Int'l Airport on June 24, 1975*, 635 F.2d 67, 76–77 (2d Cir. 1980).

accident without being told or given any other indication that he was too close to the taxiway, and without ever seeing aircraft traffic on the taxiway. (Tr. 633, 644–49, 663–65, 667–78, 678.) Other than the low mass barriers, there were no other markings on the Project site that indicated where McLean could safely park the Truck. (Tr. 164–65, 803, 1583.) Like McLean, Covenant ASAs assigned to secure the Project site also viewed the low–mass barriers as demarcating a safe area for the construction workers to remain. (Tr. 158, 167, 180, 964, 1032–33, 1035–37, 1041, 1044.)

The Court also does not find that McLean was negligent when he failed to move the Truck as the KAL aircraft proceeded down taxiway Y. Though McLean was aware that ground vehicles must yield to an approaching plane (Tr. 678), he reasonably believed that he was parked in an area outside of the Aircraft's path. The testimony is clear that McLean was never informed that restrictions existed regarding where workers could be within the barriers or that he would need to move if the taxiway became live. More likely than not, the blinding lights from the Aircraft made it difficult, if not impossible, for McLean to view the Aircraft's engine or assess that there was a risk of collision between the engine and the Truck. (Tr. 562–64, 569, 666.) McLean also reasonably relied on the proximity of Warner's van, which did not move as the KAL plane approached, to conclude that he was in a safe location. (Tr. 665–69, 686.) Although McLean's assessment was erroneous, his failure to correctly perceive the hazard or to act was not unreasonable under the circumstances.

The Court finds, however, that McLean was negligent in failing to illuminate the Truck's beacon light and that this failure was a substantial factor causing the accident. McLean acknowledged that he was required to illuminate the Truck's beacon light while he was parked in the staging area at night. (Tr. 663.) This requirement is reflected in FAA Advisory Circular

150/5370-2E and the Rules for Operation of Motor Vehicles at JFK in effect on the date of the accident. (DXs C-3, E; Tr. 1201-02, 1646.) McLean, therefore, did not exercise ordinary care and skill when he failed to illuminate his beacon light on the parked Truck. Proper operation of the beacon light involved turning the ignition one notch and switching the beacon light control to the "on" position. McLean neglected, however, to turn the key to the required position. (Tr. 167-68, 663, 714, 719-21, 1165-66, 1171-72.) As a result of McLean's failure, the Truck was completely unlit as it sat parked in the shoulder area of taxiway Y. (Tr. 166–68.) The collision that followed was exactly the sort of event that a beacon light was designed to prevent. Had McLean turned on the Truck's beacon light, the KAL pilots would have had a better opportunity to see the Truck from a greater distance, and to properly assess whether the Aircraft was going to hit the Truck. (See Tr. 1245, 1800, 1802, 1871.) Port Authority also would have been more likely to observe the Truck and direct McLean to move to a safe location. (See Tr. 789.) Therefore, the Court finds that by failing to activate his beacon light, McLean did not use the reasonable care of someone in his position and with his experience, and that McLean's negligence contributed to the accident.

2. Port Authority

Port Authority, as an airport operator, owed a duty to keep live taxiways free from obstructions that might impede the safe passage of aircraft on the taxiway. Port Authority also had the overall responsibility for construction projects at JFK. (DX E (FAA Advisory Circular 150/5370–2E "Operational Safety on Airports During Construction"); Tr. 1564–65, 1567.) With respect to work at the Project site, Port Authority's contract with Tully mandated the maintenance of an OFA within 160 feet of the centerline of a live taxiway. (DXs D at 141–42, R–3a; *see* DXs E at A–2, J6 at 38; Tr. 392, 802–03, 815, 833–34, 1392–93, 1787–88.) Under

the contract between Tully and Port Authority, if Port Authority determined that Tully personnel were located too close to any portion of a taxiway being used by aircraft, Port Authority had the authority to direct Tully to "suspend operations, remove personnel . . . to a safe distance and stand by until the . . . taxiways . . . are no longer required for use by aircraft[.]" (DX D at 138.) The FAA Advisory Circular setting forth guidelines for airport construction recommended that airport operators indicate construction locations at which no part of an aircraft may enter with barricades, and provide marking and lighting to identify and define the limits of construction and hazardous areas. (DX E at 10–11; Tr. 1707, 1753–54.)

Port Authority breached its duty to oversee construction at the Project with ordinary care and skill. Port Authority was required to provide its contractors, including Tully and Covenant, with the information necessary to ensure that OFAs around live taxiways were free from obstructions and that contractors working near AOAs could safely carry out their work. This duty included informing Tully regarding which taxiways and runways were open and when, and to delineate the areas where workers could safely remain on active taxiways. (Tr. 210, 803, 880, 898–901, 945–46, 969–72, 1725; DXs D at 141–42, E at 10–11.) Port Authority was negligent in failing to advise or inform Tully on the night of the accident that, deviating from the normal practice at the Project site, Tully's request to close taxiway Y was rejected and that taxiway Y was open to aircraft. Had Port Authority alerted Tully that taxiway Y was open, the construction crew could have postponed work for the night or adjusted its work plan, and the accident could have been averted. (Tr. 898–901, 945–46, 969–72.)

For each night in the months leading up to the accident, Tully requested, and Port Authority granted, Tully's requests to close taxiway Y to air traffic. (DX H at 3; Tr. 663, 820–21, 844, 873–75, 885–86, 897–98, 900–01, 949, 972.) Tully's work crew used the surface

of taxiway Y to carry out its work on the Project site during that time, and had parked vehicles on the shoulder of taxiway Y within the low—mass barriers. (Tr. 818, 838, 873–75, 885–86, 898, 972.) In light of this history, when Port Authority rejected Tully's request to close taxiway Y on the night of June 9, 2009, a reasonable and prudent airport operator would have taken the precaution of specifically informing Tully that taxiway Y was open — which it was required to do regardless of prior practice with respect to the taxiway — and of demarcating areas within the low—mass barriers where Tully personnel could remain a safe distance from taxiway Y. Instead, Port Authority never affirmatively informed Tully that taxiway Y was open, despite alerting Montana that runways 4L and 22R were open. (Tr. 766, 874, 881, 883, 885–86, 901; 966; DX H at 23.) Port Authority also failed to set any physical markers to indicate where workers could remain beyond the OFA of taxiway Y. (Tr. 803, 1583, 1725.) It was thus foreseeable that Tully would continue its usual practice of treating taxiway Y as closed, creating an unreasonable risk of accidents with aircraft proceeding on the live taxiway.

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²⁸ Notably, there is a presumption that taxiways are active unless Port Authority indicates otherwise. (*See* DX D at 138; Tr. 203, 210, 968–69.)

²⁹ Although Port Authority Resident Engineer Ragnauth drove around the Project site to check the location of vehicles, his assessment of whether vehicles were parked in a safe area was not based on any knowledge of an OFA. (Tr. 773–74.) Despite having responsibility for the Project, Ragnauth was not familiar with the Project safety plan and did not know the purpose of the low–mass barriers at the site. (Tr. 745–46, 779–81, 784.)

Additionally, Port Authority is responsible for ensuring that construction contractors develop and comply with a safety plan for projects at JFK. (Tr. 1568, 1725; DX E at 3–6.) Tully developed such a plan for the Project and submitted it to Port Authority. (DX L–2; Tr. 938–39.) Tully also designated a superintendent to be responsible for ensuring the safety of Tully workers at the Project site and to liaise with Port Authority. (Tr. 937–38, 940, 967.) Nonetheless, it appears that Port Authority never communicated with the Tully superintendent regarding Tully's Project safety plan or about FAA advisory circulars relating to safety at JFK construction projects. (Tr. 940–43.) Nor does it appear that Port Authority adequately reviewed Tully's Project safety plan, which failed to reference dangers near a live taxiway or discuss demarcating or cordoning off OFAs on live taxiways. (DX L–2.)

Accordingly, the Court concludes that Port Authority's negligence was a substantial contributing factor that led to the accident.

3. $Tully^{31}$

Although Port Authority acted negligently by not alerting Tully to the fact that taxiway Y was open the night of the accident and by not providing OFA markers, Port Authority's negligence does not excuse Tully from complying with its contractual duty to ensure the safety of its workers at JFK and to immediately remedy any safety deficiencies. (Tr. 815–16, 843, 937–38, 940, 967; see DX D at 118–19, 146.) Tully's contract with Port Authority specifically provides that aircraft will continue to taxi through and around construction areas while work is being performed at JFK, and that taxiway closures are anticipated but cannot be guaranteed. (DX D at 138.) Taxiways are presumed to be open unless Port Authority puts a closure in effect. (*Id.*; Tr. 203, 210, 968–69.) Under these circumstances, a reasonable construction contractor would confirm that taxiways and runways surrounding its work areas were closed before allowing work to proceed. Tully's Project Supervisor Davi, however, failed to do so. Davi testified that he did not recall Port Authority's response to his request for a closure, nor did he recall being told a time when the closure would be effective that night. (Tr. 965–66, 970.) The Tully Foreman that night, Montana, similarly had a duty to confirm taxiway Y's closure at the time he was told that runways 4L and 22R would be open that night. Instead, Montana unreasonably assumed that taxiway Y was part of a "permanent closure" that persisted until he

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³¹ Under CPLR § 1601(1), a defendant in a personal injury action whose proportionate share of the fault is 50% or less is liable for the plaintiff's noneconomic loss only to the extent of defendant's proportionate share. McLean correctly points out that Tully's culpable conduct cannot be considered to determine whether KAL is found to be 50% or less at fault for purposes of limiting KAL's liability for McLean's non-economic losses to its proportional share of fault. CPLR 1601(1); Workers' Comp. Law § 11; *Zakshevsky v. City of New York*, 562 N.Y.S.2d 371 (Sup. Ct. 1990). Thus, Tully's equitable share of fault must be proportionally redistributed among the parties found at fault.

was told otherwise. (Tr. 874, 878–81, 881, 883, 885–86, 898–901.) The Court therefore finds that Tully's agents acted unreasonably in proceeding to work on taxiway Y on the night of the accident without first confirming its closure with Port Authority.

In addition, Tully acted negligently in failing to inform its employees of restrictions on where Tully personnel could safely be located or park their vehicles when a taxiway was live. As previously discussed, Tully's contract with Port Authority mandates a 160–foot OFA from the centerline of a live taxiway, and permits work within that area only when the taxiway is closed. (DXs D at 141–42, R–3a; Tr. 802–03, 833–34.) Contrary to Tully's contract, Tully specifically instructed McLean that he was free to park anywhere within the low–mass barriers, despite some of this area being within the OFA for taxiway Y. Nobody instructed McLean that if a taxiway was live, he needed to maintain a distance of 160 feet from the centerline of a live taxiway, or that the OFA for taxiway Y extended into the area demarcated by the low–mass barriers. (Tr. 644–45, 648, 664–65, 667–68, 671–72, 675, 868–71, 881–82; see Tr. 802–03, 873.) Had McLean been aware of this requirement or this fact, it is less likely that he would have assumed that it was safe for him to remain where he was parked after he saw the KAL aircraft proceeding on taxiway Y. The Court accordingly finds that Tully's negligence contributed substantially to the collision.

4. Covenant

KAL failed to carry its burden of establishing negligence on the part of Covenant. The Court is persuaded by the evidence introduced at trial that Covenant's responsibilities at the Project site were limited to monitoring Tully workers to ensure that they did not leave the staging area unescorted and to report to any such breaches in security to Port Authority. (DX G at CAS 0033–34, Tr. 158, 1007–11, 1014–16, 1027, 1031–33, 1035–37, 1040–41, 1044.) Certainly

nothing in Covenant's contract suggested that Covenant ASAs were expected, or had a duty, to police safety at the JFK construction sites or to coordinate safety with construction contractors working at JFK. (See DX G; Tr. 187-88, 990-92.) Covenant ASAs, who were assigned to different construction sites at JFK each day and were unfamiliar with the particular needs of each site (see Tr. 211; DX Z-2), necessarily relied on Port Authority and the contractors to establish the boundaries within which construction personnel were to remain. As the low-mass barriers were the only physical markings at the Project site, the Covenant ASAs reasonably viewed the low-mass barriers as defining the construction area that they were responsible for securing and within which Tully personnel were supposed to stay. (Tr. 164-65, 803, 1583.) Whether the Truck, which was inside the low-mass barriers, was at an unsafe distance from taxiway Y was not a matter within the scope of Covenant's responsibilities. Nonetheless, on the night of accident, ASA Warner did report his concern about the position of the Truck to a Port Authority supervisor prior to the accident. (Tr. 531–32, 541, 551–53, 560, 567, 570–71, 579.) There is therefore no basis to find that Covenant breached its duty of care with respect to the events that led to the accident. 32

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The Court rejects KAL's suggestion that Warner had an affirmative duty to warn McLean of the oncoming Aircraft. (*See* Dkt. 207 ¶¶ 115, 121.) New York common law does not impose an affirmative duty to warn on bystanders. *See Colon v. Multi-Pak Corp.*, 477 F. Supp. 2d 620, 627 (S.D.N.Y. 2007); *Fahnestock & Co. Inc. v. Castelazo*, 471 F. Supp. 72, 76 (S.D.N.Y. 1990). Moreover, there is no evidence that Warner could have done anything to prevent the accident by the time it became apparent to him that the Aircraft might strike the Truck. The noise from the Aircraft would have made an audible warning futile, and Warner did not have a radio to communicate with McLean. As for KAL's suggestion that Warner could have flashed his headlights at McLean (Dkt. 207 ¶ 121), there is no evidence that McLean looked at Warner again after first seeing the Aircraft, nor is there any evidence indicating that McLean would have understood the meaning of Warner's flashing headlights. As such, even assuming Warner had a duty to warn, any breach of that duty was not a proximate cause of the accident.

5. FAA

Finally, the Court finds that the FAA is not liable for any negligence on the part of ATC. ATC was responsible for monitoring ground movement of all planes on the AOA. (Tr. 1089, 1867.) ATC's duties included issuing taxi instructions to aircraft and scanning the AOA for any hazards that might affect an aircraft's progress down a taxiway. (Tr. 1087–88, 1868); *Maloney v. United States*, 354 F. Supp. 480, 483 (S.D.N.Y. 1972) ("It was the duty of tower operators to inform themselves of dangers on or near runways and to communicate this information to aircraft or to refuse clearance until the runway was known to be clear.")

On the night of the accident, ATC received information from Port Authority that taxiway Y was open. (Tr. 1873.) ATC personnel visually scanned the AOA from a tower cab 200–250 feet above the ground, and observed lights in the construction area of the Project site, but did not observe any lights or vehicles along taxiway Y. (Tr. 1089, 1096–97, 1877.) There is no evidence that ATC personnel could have seen McLean's unlit truck from the tower cab at that distance, nor is there any indication that ATC personnel were otherwise alerted to the potential hazard presented by McLean's vehicle being parked within the OFA of taxiway Y. ATC therefore exercised reasonable care in directing the KAL aircraft to proceed to taxiway Y, and cannot be found to have acted negligently.

V. Allocation of Fault

The "apportionment of fault is a component of the liability determination." *Bryant v. State*, 850 N.E.2d 1161 (N.Y. 2006). Thus, in bifurcated trials, liability should be apportioned during the liability phase, not the damages phase. *See, e.g., Schipani v. McLeod*, 541 F.3d 158, 162 (2d Cir. 2008) (citing *Abbas v. Cole*, 840 N.Y.S.2d 388 (App. Div. 2007).)

In apportioning fault, the Court must weigh the relative degree of fault of each tortfeasor, and determine what percentage of the total fault should be apportioned to each party. *Saint*, 483 F. Supp. 2d at279; *Schipani*, 541 F.3d at163. To reach that determination, the Court considers the duty owed by each of these parties and whether the party's conduct deviated from that duty, and if it did, how that deviation compares to the other liable parties' culpability. *Saint*, 483 F. Supp. at 279; *Schipani*, 541 F.3d at 163.

After reviewing the facts and the law, the Court apportions liability as follows:

•	KAL	10%
•	McLean	10%
•	Port Authority	55%
•	Tully	25%
•	Covenant	0%
•	FAA	0%

The Court having determined liability and apportioned fault among the parties, this case will now proceed to trial to determine the appropriate amount of damages to be awarded, if any, for McLean's alleged economic and non-economic injuries.

Following the completion of the trial, the parties shall submit briefing regarding (1) KAL's entitlement to any offset for prior settlements with other responsible parties, pursuant to General Obligations Law § 15–108(a); (2) KAL's liability for economic damages; and (3) a proposed formula for redistributing McLean's and Tully's equitable share of fault for purposes of determining KAL's liability for non–economic damages. *See generally In re Brooklyn Navy Yard Asbestos Litig.*, 971 F.2d 831, 846–50 (2d Cir. 1992); *Whalen*, 703 N.E.2d at 248–51; *Dominguez v. Fixrammer Corp.*, 656 N.Y.S.2d 111, 114 (Sup. Ct. 1997).

CONCLUSION

For the reasons stated above, the Court finds that KAL is liable to McLean for 10% of McLean's damages, subject to adjustment based on New York CPLR Articles 14–A and 16, and

any offset under General Obligations Law 15–108. The parties shall submit a joint pretrial order that complies with Court's Individual Rules, for the trial on damages, by August 14, 2015.

SO ORDERED:

/s/ Pamela K. Chen PAMELA K. CHEN United States District Judge

Dated: July 13, 2015

Brooklyn, New York