Joshua Cawthra
Senior Aviation Accident Investigator
NTSB Western Pacific Region

October 13, 2017

Joshua,

Per our conversation at Reno last month, here is a statement regarding what I witnessed during the start of the IF-1 Gold Final on September 18, 2016.

Background:

IF-1 Operations crew working under Bob Bement, IF-1 Operations Director. My assigned position was on the back row.

Statement:

I did not see the incident between Race #11 and Race #1, only the aftermath. My attention was diverted directly to the rear after the flag drop by the alternate aircraft (Race #3), which was in-position and running directly to my rear.

I observed nothing unusual during the pre-race staging. Fore/aft row spacing between rows 2 and 3 was correct. From my vantage point, side-to-side spacing of aircraft for all rows were within limits.

All crew had cleared the area no later than the 2:00 minute mark as briefed. At the 1:00 mark, the RARA flagmen working the back row received a "thumbs up" from the 3 pilots on the back row (Race #'s 79, 11 and 69), then proceeded to clear themselves from the area. At that time, I had located myself in the infield, forward of Race #79 in order to wave a "courtesy flag" for the back row. My last direct visual contact with the field was approximately at the 0:30 second mark, after which I was focused solely on the official RARA Starter located in the bed of a truck adjacent to the front row. As stated above, I was aware that the alternate aircraft was still turning and in position to the rear. After waving the courtesy flag to signify the start of the race, I proceeded immediately to get the alternate aircraft shut down and off the active runway. My first indication of the incident was after I had gone back to take care of the alternate aircraft, when the RARA Security representative alerted me to the trouble up front.

Let me know if you need anything further on this.

Sincerely,

Scott Garland

Cawthra Joshua

From: Sent: To: Subject:	Jim W Monday, October 30, 2017 9:37 AM Cawthra Joshua Statement regarding the incident that occur on the start of the Formula One Championship Race on September 18, 2016.
Dear Mr. Cawthra, My apologies for taking so long to contact you.	
I have been asked to provide you with a statement regarding the incident that occur on the start of the Formula One Championship Race on September 18, 2016.	
I was positioned on the second row of aircraft and was the flag green drop for that row. My observation of the start was that everything seemed to appear as normal leading up to the start. At the one minute mark, I observed the Reno second row "Red Flagger" hold up one finger indicating the one minute time hack and then getting a firm thumps up from each of the two pilots on the second row before exiting the runway. With that, my attention turned to the Reno Starter position up pasted the front row of aircraft. My full attention was then focused on the Reno Starter at that point. I observed the green flag being raised and the red flag being lowered. I followed by rising my green flag. It is at this period of the start, is where I believe, that Race #1 began to experience engine problems and the subsequent shutdown occurred. Seconds later, the Reno Starter dropped the green flag and I followed with my green flag drop in sequence with the Reno Starter and proceeded to run several yards back to clear myself away from the runway. When I turned around to view the runway, I saw Race #1 stationary on the runway and the third row of aircraft approaching from behind. I then noticed that Race #11 was directly behind Race #1 and for a moment, I thought that Race #11 saw Race #1 and was going around him. However, a second later the collision occurred. I then checked the scene for safe access on the runway and proceeded to render aid to Race #11.	
This is my accoun September 18, 20	at of the incident that occur on the start of the Formula One Championship Race on 016
If you have any fu	urther questions please feel free to contact me.
Sincerely,	
Jim Weiherer	

STATEMENT OF FACTS CONCERNING THE FORMULA ONE AIRCRAFT COLLISION INCIDENT AT NCAR, SEPTEMBER 18, 2016.

David Triano Weight and Balance Inspector, IF1 Technical Inspection Team

6/11/2017

On the morning of September 18, 2016 as part of the IF1 Technical Inspection team I was assigned to 'Row 2' for the Formula One Gold Final race. I was joined by two other members of the Technical Inspection team in this activity, Tom DeHart (Technical Director, IF1) and Eric Hubler (Aircraft Systems Inspector). Inspector Hubler was positioned on Row 1, and I believe Director DeHart was positioned with Ops Director Bob Bement. My responsibility was to circulate around the two racers on Row 2, observe their start-up, and carefully watch for any operational anomalies or functional issues with these aircraft. On the inside of Row 2 (south) position was Race 87 piloted by Steve Temple, and on the outside (north) was Race 1 piloted by Thom Richard.

At the 10-minute time hack (10 minutes until the green flag drops to start the race) I began to circulate around both of these aircraft as their crews finished static preparations for the start. All was normal, nothing unusual or problematic was observed in either aircraft. I made about 2 circuits of each aircraft per minute, up-close and also from about 20 feet away, as time counted down to the start.

Around the three-to-four minute time hacks, teams close up the canopies on their aircraft and initiate the engine start. On Row 2, Race 87 and Race 1 started up during this time, and I continued my circuit of the two aircraft checking for any problems, with the engines running on both. Race 87 was exhibiting normal engine run with no issues, and ran-up his engine to higher rpm's with no anomalies noted. I positioned myself in Pilot Temple's front left vision and made the 'thumbs up' motion, which was returned immediately by Temple. Race 1 started and ran up his engine, and I noted sporadic ignition as his engine rpm's increased. I positioned myself in pilot Richard's front left vision, and motioned with my right hand in a rocking motion, questioning the ignition anomaly. I received no visual response from pilot Richard, who continued with his engine run at the two-minute time hack, the time at which all crew and tech inspectors leave the runway to await the start. I assumed the pilot-in-command Richard was satisfied with his status, and left the runway.

I returned to our golf cart, which was parked about 40 feet south of the runway, and went east to pick up Inspector Eric Hubler, who was inspecting the first row. I picked him up, and we began our drive back to the race crew observation area. During our drive back, I discussed with Inspector Hubler Race 1's ignition, which I described as 'missing and out-of-time'. During this drive back, all of the racers increased their rpm in anticipation of the green flag, at which time both Inspector Hubler and I heard loud, repeated sounds of a badly mis-firing ignition. I stated to Inspector Hubler again that 'That must be Thom, sounds awful'. This sound stopped shortly thereafter, and the green flag dropped, which we could hear from the sound of aircraft in motion as they began their takeoff roll. We arrived at the observation area at this same time, when we saw a commotion at the west end of the runway, and it became clear that there had been an incident. After a minute of

consideration as to where we would be of most assistance, we then drove the golf cart back to the starting area to offer assistance, and saw the two damaged aircraft, Race 1 and Race 11. We did not witness the actual impact of the two aircraft. We escorted Race 1 (which was under tow by its crew) back towards the observation area, and then continued back to the IF1 hangar.

Respectfully submitted,

David Triano IF1 Technical Inspection Team

Cawthra Joshua

From: Bo Masuyama

Sent: Sunday, September 17, 2017 1:40 PM

To: Cawthra Joshua

Subject: 2016 IF1 start incident RARA Starter Statement

Will this suffice Josh? Lmk...mahalo

Rock and Roll, Bo Masuyama

Begin forwarded message:

From: Robbie Burgess

Date: September 17, 2017 at 13:35:12 PDT

To: Bo Masuyama

Subject: 2016 IF1 start incident

On September 18,2016, I was standing in the rear bed of my truck during the start of the Formula One Gold Race. I observed that all of the Formula One aircraft were running in all three rows. Prior to raising the green start flag, I raised the red flag and slowly returned it to the bed of my truck and grabbed the green flag and raised it up. I observed that all of the Formula One aircraft were running and at the scheduled Formula One take off time, I dropped the green flag. I observed the front row start their take off roll and immediately observed Formula One Race#1 prop stop. I then observed the canopy open on Race#1 and the third row of Formula One aircraft taking off approach the second row. I observed Formula Race #11 from the third row strike Formula Race#1 in the second row.

Robbie Burgess Chief Starter Reno Air Race Association

Sent from my iPhone