

Sim-Outhouse February 23, 2010 Appeal to the Executive Committee Decision on the FlightSim NCRG-NIUE leg.

Executive Committee Decision Issued February 25, 2010.

The Decision.

The Executive Committee has considered the Sim-Outhouse team's appeal to the Committee's ruling on the case of N22CA's irregular leg (NCRG-NIUE) for Team FlightSim.

Team Sim-Outhouse has taken appeal on three separate grounds. First, they argue that the pilot "modified (by his own admission) the aircraft files to change the performance" and that the modification constituted a violation of Rule 6(iii)(b)'s prohibition on flight model modifications. Second, they argue that the penalty we applied was based on an erroneous calculation and was as a result too low. Third, they argue that the evidence demands concluding that the Flightsim.com pilot did in fact use an aircraft model in violation of the rules. We deny the appeal with respect to the first two grounds and affirm it with respect to the final ground. In so doing, we reverse our earlier judgment and declare the Flightsim.com leg from NCRG to NIUE invalid.

The Committee agrees with the appellant that the leg was illegal and thus invalid. Team FlightSim must re-fly that leg. Alternatively, the team may choose to implement the retrospective wingman rule and incur a penalty of 45 minutes. Because WombatOne completed the wingman leg before N22CA finished the baton leg, there is no additional time adjustment.

The Explanation.

First, we explain the original ruling. Then we outline the nature of the subsequent inquiry and the reasoning that moves us to now reverse that original ruling.

The Original Ruling.

At the time of the original ruling, the Committee was suspicious that the leg looked irregular but the evidence for negligence or malfeasance was not overwhelming. The Duenna recorded a long period of sustained level flight that seemed too fast for a standard P-38. That fact, coupled with the indication that the aircraft title indicated "P-38 White Lightin" (the name of Lefty Gardner's Reno Racer) suggested something was not right.

That title at first seemed to indicate that the pilot was using David Copley's Racer model, but in fact the Copley aircraft carries the title "White Lightin' " which is not the same. In addition, the Duenna record of the leg's aircraft characteristics indicates that the David Copley Racer model was not being used. Some research pointed toward Mark Rooks' porting of David Copley's aircraft into FSX which does carry the title "P-38 White Lightin". Mark Rooks not only ported the aircraft but he also deliberately tweaked the aircraft to perform as a Reno-racing P-38. He explicitly states in both the FlightSim.com website description and in his readme that he altered the flight dynamics for that purpose. (Our examination shows at

least two major modifications.) We shall refer to this aircraft as the Rooks P-38 Racer. The use of either the David Copley Racer or the Rooks Racer is illegal as no one-off racer models are allowed in the race.

When the Executive Committee's was notified of a possible irregularity, we undertook a quick investigation. A member of the committee quickly questioned the pilot of N22CA and pointedly asked about the legality of the aircraft and the possibility that the pilot had used the Rooks P-38 Racer. The pilot denied anything illegal. He said that he was using the Roger Mole port of David Copley's P-38 into FSX. That port uses the David Copley flight dynamics. The pilot indicated that he had downloaded the Rooks P-38 Racer to obtain the textures of "P-38 White Lightin" because he liked the look.

The Committee was thus faced with evidence of something being amiss in the Duenna-reported aircraft performance (NCRG-NIUE) and the pilot's statement that he was in fact using David Copley's P-38 in all respects other than the repaint textures. Giving the benefit of the doubt, and assuming the pilot was being entirely honorable, the Committee decided to apply a "corrective penalty" that eliminated the small advantage that Team FlightSim might have received from the questionable leg.

Our calculations show that during the hour that N22CA flew the P-38 at altitude, he covered about 66nm more than would a David Copley P-38 at that time and altitude. Given the speed of the dcc P-38J, that amounts to about 11 minutes advantage. (The pilot slowed down considerably to complete the leg. But the Committee cannot account for the pilot's later decisions.) The estimated 11 minute advantage, rounded upward, provided the basis for the 15 minute "corrective" penalty.

The Committee's first ruling held that the Flightsim.com pilot intended to follow the rules. Based on this assumption, we applied a corrective penalty (a 15-minute delay) rather than the harsher, punitive penalty that would come from a negligent rules breach (invalidation of the leg.)

The Appeal.

In response to the Sim-Outhouse Team's appeal, the Committee re-opened the case and conducted a more extensive investigation. We consider each ground for appeal in turn.

1. Flightsim.com Aircraft Modification Illegal under Rule 6 iii (b).

First, the team argues that the Flightsim.com pilot "modified (by his own admission) the aircraft files to change the performance and that those changes significantly altered the aircraft's performance to his advantage..." This would be illegal under Rule 6 iii (b). In our interview, the pilot stated his intention to merge the standard Copley P-38J model with the Rooks paint. Using a standard aircraft with an alternate paint would be legal. However, our further examination of the evidence (see below) demonstrates that the pilot was not using the standard aircraft. We are uncertain whether the pilot modified the aerodynamics himself or used another aircraft produced by another designer. Nevertheless, we find support for the

essence of the Sim-Outhouse claim that the aircraft was illegal.

2. Penalty Calculation Erroneously Small

Sim Outhouse's second claim was that the penalty applied was too small because the Committee used 30 minutes rather than 50 minutes as the amount of time flown unrealistically fast by the Flightsim.com pilot. While this appeal is technically correct, its logic does not change the judgment. The penalty applied was a "corrective penalty." Such penalties have two parts: a correction, which attempts to approximate the amount of harm done, and a slight additional penalty to discourage further rulebreaking. This latter is accomplished by simply rounding up by a few minutes to the nearest "round" number - the nearest 15-minute increment. Here, the redone calculations show a time advantage of, at most, 11 minutes. Thus the Committee would still round to a 15 minute corrective penalty.

3. An Illegal Aircraft

We have conducted a thorough investigation into this flight and have determined that the evidence requires a finding that the pilot evinced a wanton disregard for the rules when he flew an illegal aircraft in the race.

First, we conducted tests of the David Copley P-38J and the Mark Rooks P-38 Racer. Both were flown at 29,900 feet, the altitude at which N22CA flew the questionable leg. The tests were conducted using the MS FSX "Clear Weather" option which roughly approximates ISA conditions. We used AFSD to measure the speeds. We then compared the theoretical maximum performance numbers of the two aircraft, one which the pilot claims to have flown and the other a likely possibility because it carries the same aircraft title as the plane actually flown in the race. These two performance numbers may then be juxtaposed against the performance that the Duenna recorded during the high speed level flight of the leg in question. If the actual recorded performance resembles that of the David Copley P-38, then the pilot's claim is supported. If the actual flight numbers look more like the Rooks P-38 Racer, then the SOH claim of an illegal aircraft becomes more plausible.

Comparative Speed Tests Copley P-38J, Raooks P-38 Racer, and Observed Performance

Aircraft	Max KIAS	Max KTAS / GS
Copley P-38J	221	353
Rooks P-38 White Lightnin	268	413
N22CA (Duenna Reading)	269	408-425

Notes. The first two tests use AFSD and "Clear Weather" in FSX which approximates ISA. Under these conditions, KTAS and Ground Speed are identical. The last row is the actual Duenna recording of the leg in question.

As a preliminary, the Duenna recording of N22CA at altitude gives varying Ground Speeds—a function of varying winds no doubt. So we focus on the Knots Indicated Air Speed (KIAS) for a true comparison. Compare the KIAS numbers in the first and third rows, those for the David Copley P-38J and the recorded flight of N22CA. The data are inconsistent

with the pilot's story of using Copley flight model. The indicated air speeds, 221 and 269, differ by 48 kts! The pilot was not flying the Copley P-38J.

Instead, the evidence shows that N22CA's leg is almost exactly what we would expect if it were flown by the Rooks P-38 Racer, the "P-38 White Lightnin" model. The difference between the actual performance and the performance expected from the Rooks P-38 Racer is one knot—easily accounted for by measurement error and computational rounding.

Our research, then, demonstrates clearly that the pilot of N22CA was using Mark Rooks' special racer version of the P-38. Or that he was flying another identically illegal P-38, perhaps created by the pilot himself. In either case, the aircraft would be ineligible for the race.

The pilot is a four-year veteran of the race. He is responsible for knowing that there are restrictions on the sorts of aircraft that are allowable and he is responsible for at least reading the author's description of the aircraft that he flies in the race. In addition, he claimed to have changed the aircraft's paint but not its flight dynamics—so the pilot appears capable of understanding the basics of FS aircraft.cfg files. Moreover, this pilot has produced a number of flight simulator aircraft himself.

It is simply not believable that this was the result of an innocent mistake.

We are thus forced to agree with Team Sim Outhouse that this pilot failed to exercise due diligence and violated the aircraft eligibility rule.

Penalties.

This race saw us introduce a new standard: unintentional, non-negligent rules violations incur only a corrective penalty rather than the harsher sanction of declaring a leg invalid. This is the standard that we applied in, for example, the iFlyOnline leg from ZYCC to UHSS. As we noted in that decision, "Intentional breaking of the rules will incur punitive penalties."

In contrast, the current case represents either a negligent or an intentional violation of the rule. Precedent and the expectations of the teams make the standard "punitive" penalty a voiding of the relevant leg.

With no mitigating factors, we are required to apply that penalty here. We thus declare the Flightsim.com leg from NCRG to NIUE invalid.

Team Flightsim.com may either re-fly the leg or invoke a retroactive transfer to their wingman for a 45-minute penalty.

Responsibility.

During the Race, each team is responsible for the legs flown by its pilots. The costs of penalties for illegal or irregular behavior is borne by the team as a whole. Thus any untoward

actions by any single pilot will be felt by the entire team.

There is absolutely no evidence that the team, FlightSim, had any knowledge of any irregularities in this leg. In fact, the timing for the entire leg looks like that which might be produced by a legal version of the P-38J. The original suspicion, that this was the David Copley Racer, was immediately understood to be wrong. Further, the pilot maintained that he was flying a legal aircraft. If everyone is playing by the rules, this quick examination would be sufficient and the team would be expected to move on to the racing at hand.

It is only by examining closely the Duenna flight recording, minute-by-minute, that any hint of irregularity might be apparent. A firm confirmation of wrongdoing requires not only examining the record but also comparative flight testing. We do not expect teams to conduct such a truly detailed examination of every leg. Neither can the Committee perform such a task. Events move along quickly and there are more than 400 such Duenna records that might be examined. Accordingly, we cannot expect that fear of enforcement by close scrutiny to be the standard by which pilots fly. Instead, as members of the Race community, we must all rely on the honor of all pilots to abide by the rules and fly honest and legal legs.

In this case, the members of Team FlightSim as a team were harmed and betrayed by the pilot's behavior. Those members, and all the teams' racers as a community, were damaged by the actions of a single pilot.

The entire community appreciates Team FlightSim's dedication to the race standards of honesty and honorable behavior, their quick recognition of the nature of the current situation, and their determination to pursue a just outcome.

In making this ruling, the Executive Committee recognizes a need to review the Rules and make changes, if required, to deter any further such experiences. It is our hope and expectation that the members of the community will help in this review process and be willing to improve matters.