

January 12, 1976

FROM: C. F. Blair  
TO: Capt. Ron Crozier  
SUBJECT: N3284

Reference the N3284 rhubarb last week your letter confirmed my own impression that you were a victim of circumstance, or "the guy in the middle".

Let me first emphasize that flying safety is the prime consideration at Antilles Air Boats, and that no one has, or will, ask any pilot to fly an aircraft which is not airworthy.

With reference to N3284, it was decided by management several weeks ago to operate this aircraft less vigorously, as a spare aircraft, for the following reasons, pending further investigation.

1. Oil consumption on the right engine was allegedly somewhat on the high side. The engine operation, otherwise, was known to be faultless and could be classified as above average!

2. The aircraft bottom needed some attention, although there was no pressing structural problem. The leakage was inconvenient, but not serious enough to effect operations except if it were waterborne for extended time periods, such as at St. Martin if we allowed it to go there.

For the above two reasons, which are not normally classified as "airworthiness" items but as items which needed further technical analysis, AAB management put this aircraft on the above mentioned status pending further investigation.

Unfortunately, because of the pressure of holiday schedules, a careful calibration of the two items was delayed. Meanwhile a talking campaign among certain St. Thomas pilots got started, which eventually became somewhat hysterical. N3284 suddenly contracted leprosy. Alarmed pilots and mechanics wouldn't go near it.

On Saturday, January 10, the undersigned together with Capt. Castruccio and Capt. Lincoln, conducted the delayed technical calibrations, with the following results.

Reference Item One (Oil Consumption) The aircraft was flown three hours, including eight takeoffs and climb-outs to altitude. Oil consumption on the engine in question was 2.3 gallons or approximately three quarts per hour, which is on the high side, but well within limits, especially considering the number of takeoffs and climb-outs.

Considering that the oil consumption limits are calculated for longer flights which do not involve multiple takeoffs, it is obvious that the cruising oil consumption of this engine is a long way within limits, probably below a half gallon an hour. Therefore this suspected engine item turned out to be of no special significance, although we always keep a watchful eye on high time, as well as low time engines.

Engine performance on N3284 is excellent, in all respects, with normal instrument readings. This does not mean the engine cannot fail within the next five minutes. However, as any R-985 engine expert can tell you, the chances of such a rare occurrence are greater with a low time engine recently out of overhaul, than with a smooth-running high timer.

Reference Item Two the undersigned "water-soaked" N3284 in the Christiansted harbor for a twelve minute period as timed by Capt. Castruccio. After taxiing to the ramp, various calibrated receptacles were installed to catch the drainage. A total of 42 gallons was thus recorded. Adding a 20% factor for leakage which went uncalibrated, the total leakage in 12 minutes worked out at 50 gallons, or 250 gallons an hour.

Obviously this is not a desired condition, but neither can such leakage be described as a significant "airworthiness" item for the type of operations we are involved in. The taxi-out of N3284 before takeoff would normally accumulate approximately 25 lbs. of water, as would taxiing from landing to the ramp, for which allowances could be made. The water thus collected has been in the area of the center of gravity of the aircraft, thus having no effect on weight and balance.

I can assure you there is no validity in your expressed concern about the buoyancy of N3284, assuming an engine failure causing a return to the outer harbor (Crown Bay) at St. Thomas. Certainly the passengers would be removed by boat at an early stage. Whatever the circumstances, this aircraft would have remained afloat indefinitely (for days or weeks) by using only the crudest of bailing techniques, in the unlikely circumstance that it couldn't have been towed to the base within an hour or two.

I am writing from a background of 12 years of personal experience with these problems. One particularly difficult operation occurred approximately nine years ago. One of our G-21's landed with ten passengers in the open sea fifteen miles south of St. Thomas while enroute to St. Croix. (The pilot had failed to check his fuel supply at St. Thomas). It was my job to go out and supervise the towing of this aircraft back to St. Thomas. This was done in five hours, with a Goose that was also a leaker (although somewhat less than 3284). Using the crudest techniques there was no buoyancy problem at any time, nor would there have been

if the leakage had been much more severe.

Incidentally, on this occasion, the passengers were evacuated by the Coast Guard in reasonable sea conditions. They returned to St. Thomas, and all of them, (including former Governor Evans) after disembarking from the Coast Guard vessel, took the next Goose to St. Croix.

Getting back to N3284, to alleviate further concern, three tired looking, but non critical, stringers were replaced in the bottom of the aircraft on Sunday, Jan. 11. This should alleviate 75% of the leakage. The aircraft will probably be the most watertight in the fleet when some re-skinning is done in the area immediately forward of the step as soon as an opportunity presents itself, but no later than the next #6 check.

I might add that the bottom planing characteristics of N3284 have been within normal limits. This aircraft may not have the best "bottom characteristics" in the fleet, but it does better in this respect than various other aircraft with sound bottoms.

We, in management, can be faulted for our failure to perform an earlier technical analysis to dispel the rumors. This mistake, unfortunately, was compounded by the belligerence of at least one St. Thomas pilot who persistently sounded off out of a near-vacuum of knowledge about the situation at hand.



C. F. Blair

cc: All Antilles Air Boats Pilots  
Capt. Lincoln  
Capt. Scott  
Capt. Gillies  
Capt. Castruccio  
Capt. Monkton  
T. Highfield  
V. Pinheiro  
Carl Jensen  
Claude Austin  
Charles Frehling  
Rupert Ralph  
Joe Stoy  
George Molitor

\*various calibrated receptacles  
Maureen's kitchen pans