

March 26, 1941.

Inspection Report - Laboratory
Pan American Airways - Miami, Florida.

MR. OSCAR B. LEWIS,

Dear Oscar,

It will probably be recalled that at one time, Pan American Airways were supplied with many cans of aviation Ethyl Fluid to be used for small quantities of spiked blending in connection with supplies of fuel taken on at various small points in Central and South America where refueling of the planes was required as a result of the nature of their operation. This was due to the fact that high octane number fuel that would be required for their engines was not available at many of these Central and South American points, and the spiked blends were their only means of obtaining satisfactory fuel at some points after leaving the West Indies. These cans of fluid were listed as part of the equipment of each plane where it was carried and had to be checked in and out by the pilot handling the run. This practice was discontinued after high octane number fuels became available and subsequently the only fluid that was used by Pan American Airways was in connection with their knock rating engine in the Control Laboratory at Miami. After reference fuels became available for use with knock rating engines, Pan American Airways discontinued the use of Ethyl Fluid for this purpose in their Control Laboratory.

On March 24, 1938, we received a letter from the Division Engineer at Miami which we are quoting herewith:

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PAN AMERICAN AIRWAYS INC.
Miami Office, P.O. Box 2811, Miami, Florida.
March 24, 1938.
File No. C-6
Mr. J. I. McGooley
Ethyl Gasoline Corporation
501 Rhodes-Haverty Bldg
Atlanta, Georgia.

Dear Sir:

The Laboratory Chemist has asked us to advise you that, as agreed in your conversation with him while you were in Miami, he has disposed of four potentially leaky cans of ethyl fluid by dumping them into deep water in Biscayne Bay about three miles off shore. Due to the high specific gravity of the contents, all cans sank immediately.

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It was our understanding that the disposition of the fluid mentioned in this letter covered all that was in the possession of the Pan American Airways, either for use in the Control Laboratory or that which had been available for the spiked blending mentioned above.

On March 26, 1941, while talking with Mr. Hendren, who is in charge at the Miami Control Laboratory of the Pan American Airways, it was learned that since the first of this year, he has again been using fluid in connection with his knock rating engine. This is due to the fact that they are now using 90 octane number gasoline in most of their airplanes and are also experimenting with some small quantities of 100 octane number and above fuels. Reference fuels are of no use to them in their work of rating fuels of 100 octane number and above. Further investigation developed the fact that the fluid was not being stored in the hood which had been built for this purpose years ago, since the laboratory apparently does not have sufficient laboratory hood facilities to carry on all the work being handled at the present time, and this particular hood is being used by them for other purposes although the dilute fluid stand is maintained in the hood permanently. It was found that this can of fluid was currently being stored in a chemical storage cabinet with considerable other material, and where there is no satisfactory natural ventilation.

It was brought to Mr. Hendren's attention that this fluid should be kept in the hood which was built for this purpose and which also contains the burette and stand, and that this hood should be used for no other purpose. The can of fluid was then put in the hood but Mr. Hendren made the statement that he could only promise its being kept there as long as the facilities of that hood were not needed for other purposes. However, upon being told that under these circumstances, it was very probable further purchases of fluid for use in the laboratory would be looked on with disfavor, he promised to abide by our requirements for the handling and storage of this material.

Mr. Hendren told me he has had this can of fluid (Number C-1571) for several years and that it was retained at the time the other fluid mentioned in Mr. Toomey's letter was destroyed. This was apparently done without the knowledge of anyone in our company, otherwise regular inspections would have been made at this point.

Laboratory inspections will be made in the future at regular intervals and reports filed as required.

Mr. Phipps was with me on all contacts.

Very truly yours,

GPR/P.L

George P. Rosser.

CC-Dr. Kehoe
W.D. Phipps
H.I. McCoolley

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