

“Scrapped” Aircraft Parts!©

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Scrapped aircraft parts are “junk parts” that are not approved/not certified/not authorized for installation on commercial aircraft! During October/1979 through October/1980 I was a MDC Commercial Aircraft Field Service Representative assigned to Varig, the then 53-year-old Brazilian flag carrier based in Rio de Janeiro. The following describes an experience I had at Varig as related to a “scrapped/junk part”!

While making my routine daily rounds at Varig, a hydro-mechanical engineer advised me that Varig intended to accomplish their very first DC-10 main landing gear assembly removal/replacement during the next few days. I was further informed of the serial numbers of both the main gear that would be removed and the main gear to be installed. Later in the day after I had returned to my office, I decided that as a courtesy I would write and send an “information only” (no reply required) type telex message to Douglas’ Product Support Hydro-Mechanical group in Long Beach to inform them of Varig’s gear change plans. By then my work day was over and I departed for home.

Shortly after my arrival in my apartment, I received a phone call from a landing gear expert in the Douglas-Long Beach Product Support Hydro-Mechanical group. He very emphatically and frantically stated that he had received my telex and I was instructed to inform Varig that they WERE NOT TO INSTALL the reported serial number main landing gear on their DC-10!! No additional explanation could be provided by Long Beach at the time but I was advised that further information would be provided! I immediately contacted Varig and advised them not to install the noted gear!

Later the next day Douglas-Long Beach informed me why the noted landing gear was not to be installed. It seems that the particular gear in Varig’s possession was one of 10-12 new gear assemblies being delivered by the supplier to the DC-10 production facility in Long Beach. These quite-tall main landing gear assemblies were secured in an upright/vertical position on a flat-bed trailer; enroute the truck/trailer passed beneath a low bridge; all of the gear assemblies clipped the bottom edge of the bridge, were ripped loose from the flat-bed, and tumbled end-over-end down the hard-surfaced road! Given that all these gear were damaged, Douglas inspectors deemed all to be “unserviceable” and they were all declared to be “scrap parts”. After I shared all this information with Varig’s hydro-mechanical engineer, he and I did a detailed examination of the landing gear in question and, although the gear had a fresh coat of glossy gray paint making it look new, it didn’t take long to find a large blended-out area at a critical location on the gear; we surmised that it was likely that this gear, had it been installed on a Varig DC-10, would have failed during its very first landing!

It turns out that Varig had purchased the noted landing gear from Aaxico, an aircraft parts/junk dealer in the Miami, Florida area. As a result of this landing gear situation, Varig initiated legal action against Aaxico.

I was extremely impressed with the Douglas-Long Beach Product Support Hydro-Mechanical group for their vigilance and expertise in dispositioning this matter!

During the year 2014, 5 years after my retirement in 2009, as I reflected back on this experience from 1979, I questioned exactly what everyone had learned from experiences like the one I've just described!? In my mind when an aircraft part or assembly such as a main landing gear is declared to be a "scrapped part", the part needs to be chopped up, smashed, or otherwise rendered permanently unserviceable such that no junk dealer could ever pass it off as a serviceable part – to any airline, anywhere in the world!! So, surely there are now regulatory authority guidelines in place?? My research has revealed that at least from the year 1996 and onwards there has been an applicable FAA "order" in place as follows:

- FAA Order 8120.11, Disposition of Scrap or Salvageable Aircraft Parts and Materials, issued February 12, 1996
- A FAA Memorandum dated August 16, 2012, cancelled Order 8120.11 because duplicate information is contained in FAA Advisory Circular 21-43, Production Under 14 CFR, Part 21, Subparts F, G, K, and O, October 16, 2009.

In a nutshell, although a bit late in coming, the current FAA order requires that "scrapped parts" be "mutilated" to an extent that they can never again be made to be serviceable parts! Good news!!



Typical DC-10 Main Landing Gear Assemblies