

Off Airport ULD— The Numbers Tell the Story

The whole question of managing airports has been on ULD CARE's radar screen for over 10 years. The first recorded initiatives were the establishment of a working group in 2012 headed by Charles Drummond that did a great job in defining the problems and also the obstacles. Sadly, in spite of all the effort that went into this initiative, legacy messaging and IT Systems presented an insurmountable obstacle and the problem remains unsolved.

Fast forward to 2018 when ULD CARE started to look at potential new technologies such as blockchain, APIs and Apps. This led to the proof that a blockchain replacement of the current IULDUG system was needed as well as the publication of the ULD CARE White Paper on the subject.

Before moving to the next stage, we felt it was essential to try to quantify the size of the problem. We therefore started collecting some hard numbers from various metrics such as the number of ULD that is overdue for a return at any particular point in time, the total number of off airport moves per month, etc.

ULD CARE was extremely fortunate to be assisted in this part of the project by Charles Drummond. Charles is another example of the gravitational pull of the ULD industry, having switched to a completely different industry in recent years before re-engaging on this project. We also reached out to a good number of our ULD CARE members and asked if they could provide us with data, on a confidential basis, relating to their off airport ULD moves.

It's safe to say that every single airline we reached out to say that this is in fact a significant issue for them. Some were unable to provide any hard data, others provided some estimated numbers and, thankfully, for the purpose of this project, a good number provided us with detailed listings of out and return transfers of their ULD, using data from their in-house ULD control systems. We ended up with over 300,000 lines of transactions from a large number of airlines which could then be used to compute reliable industry wide figures.

To keep things simple, we decided to analyze only PMC moves, as we believe these make up probably 85–90% of all off airport moves.

And we also estimated the global PMC fleet to be 400,000 as we believe this to be a somewhat conservative but realistic number.

So, what did we find?

1. Comparing the number of off airport trips per month against the combined PMC fleets used in the study, we concluded that 50% of PMC are making an off airport trip each month. Standing back and asking ourselves if this seems reasonable, the answer is yes it is. The global air cargo industry relies enormously on forwarder consolidation activities, and while in some locations off airport ULD operations do not happen due to customs and/or security regulations, the overall industry trend is for very significant off airport activity. Taking our global fleet number of 400,000 PMC this results in 200,000 off airport PMC moves per month.

2. So, if 50% of a typical airline's PMC fleet goes off airport each month, how long are they staying off airport? Given the velocity of air cargo operations, where speed is everything, it would seem unlikely that once a forwarder receives a loaded PMC they would not break it down without delay and so make the PMC available for return to the airline owner. And, of course, the forwarders just like in the maritime industry, should receive some "free days" to carry out this process. Looking at data, we obtained from the maritime industry, we can see that while free days vary widely by port and shipping line, there is an average of about 4–5 days. The IULDUG system has also operated using 5 free days for many years, we therefore used 5 days as the free period. And what we found was that close to 40% of all off airport PMC transactions ended up exceeding the 5 free day period. Given the previous figure of 200,000 off airport PMC moves per month, this comes out at around 80,000 PMC moves exceeding a nominal 5-day-free period each month.
3. The next question was to check out by how long, on average, did these 40% of PMC fleets exceed the nominal 5-day-free period. Here the average is 6 days, or 480,000 "PMC Days" where the airline owners are unreasonably deprived of the use of their PMC assets. Another way of looking at this number is that on any particular day of the year, about 25,000 or 6–8% of the world's PMC fleet is overdue for return beyond 5 days. This is a staggering 600 or so B747F ship sets, or looked at another way is around US \$25 million of the airline's ULD property.

With these numbers it is quite clear that the current practice of airlines not imposing any kind of penalty on the freight forwarders for the late return of the equipment is unsustainable. Actually, there are a handful of airlines that are already having such charges and another group that are seriously considering a move in this direction. At ULD CARE, we believe that in providing this detailed analysis of the size of the issue and we are contributing significantly to an industrywide initiative to move into line with the practices in other segments of the transportation industry. Particularly those in the ocean freight industry where the charging for late return of equipment, known as detention in their industry, is universal.

ULD CARE wishes to acknowledge the very considerable assistance of Charles Drummond, currently Director of Business Development and Sales at Safran Air Cargo, in conducting this analysis.