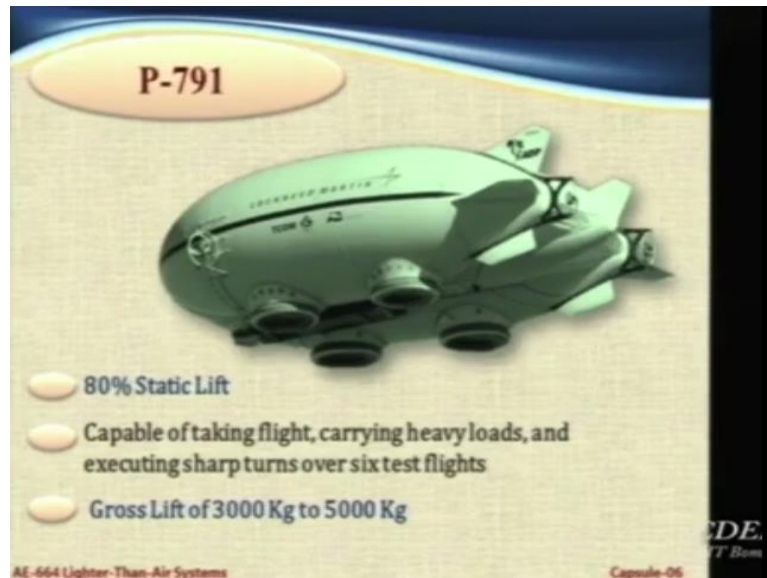


Lighter-Than-Air Systems
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Lecture – 105
Lockheed Martin's P-791 Hybrid Airship

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So this is the famous P-791 and you can notice that it can lift between 3 to 5 tons of weight. That is the desired capacity. I am not saying that the prototype which was built was carrying so many kilograms, I am just saying that the prototype was built for a vehicle which would eventually lift between 3 to 6 tons of weight. It was motivated by the requirements of the US Defense Services in Afghanistan.

So they thought it is possible to just transport this big vehicle to their individual location where you need support groups and even transport equipment. So the static lift is 80%, 20% is, actually this is wrong it is only 60%. So let us see. Let us have a look at this particular vehicle. **(Video Starts: 01:08) (Video Ends: 04:25)**. What is unfortunately is that like so many projects of the US Air Force, this project was technically successful, but they did not have any funds remaining to execute it.

So simply because of financial reasons, this project has been currently temporarily shelved. But there is a tremendous interest in this capability for other applications such as transporting huge amount of logs in Canada during winter where there is a great requirement for transporting

heavy cargo. And the only mode available today is either using trucks on icy roads or very long distance railway, which can be very difficult and hazardous during the winter months.

So, some researchers in China are very proactively pushing the possibility of cargo airships. So they conduct a seminar once in 2 years called as Airships to the Polars or Polar Airship Group. When you get a chance, please try to search for this particular group called as Polar Airship Group. And you will find the University of McGill and some other universities in Canada there are people professor Barry Prentice, University of Manitoba.

He is very actively involved in promoting the usage. He is an economist, transportation economist, but he is very proactive in pushing the use of airships for large volume cargo.