

Preparing the Kitemill plane at the Lista Airborne Wind Energy Center (10 May 2017)







Tore Meinert

Advisor

on behalf of Lista AWE Center AS

Lista Fly- og Næringspark
Bygg 36
4560 Vanse
Norway

tm@madsenbrekke.no
www.kitemill.com



Lista AWE Center AS

The Establishment of an Airborne Wind Energy Test Center in Lista, Norway

Tore Meinert¹, Harry Nøttveit¹, Lode Carnel²

¹Lista Airborne Wind Energy Center AS

²Kitemill AS

The global airborne wind energy industry consists of individual organizations developing their own proprietary technology and solutions. Several common challenges are therefore dealt with in parallel which results in multiple budgets used to reach the same goal. There exist different technology solutions which complicates the picture for financial investors.

Additionally, there are common risks to the industry, such as permits, certifications, wind conditions, site evaluation, system specification etc. Having these challenges in mind, there has been founded an airborne wind energy test center at Lista during 2017 along the Norwegian south-coast. This presentation will describe the motivation and mission of the test center as well as the characteristics of the test site.

Lista is a city that is characterized by extremely good wind conditions and a mild climate in Norwegian terms. This is confirmed by the presence of windfarms harvesting wind power despite the low electricity prices in Norway. The historical wind data have been analyzed from the past 30 years and compared with other places in Norway. This analysis confirms the potential of the test center to offer wind conditions normally only present offshore. The test center is located next to Kitemill's test site on the airport, which is currently a temporary danger area that is activated issuing a NOTAM. Lista Test Center has now applied for a permanent permit to operate the test center encom-

passing a large part of the entire airport. The mission of the center is to provide facilities for other AWE players to test out their equipment on the same spot and to avoid each company having to deal individually with common problems. Several systems can be compared and tested in a common environment. Once operational, the test center will serve as a demonstration place for politicians that are committed to introduce a new energy technology.

The center is an independent organization apart from Kitemill and is owned by industry representatives from the region around the airport who are committed to renewable energy. The first customer of the test center will be Kitemill and other AWE companies are strongly encouraged to join as well.



Activity and the operational area at Lista Test Center