Comparing these units with other large scale research units (4), such as the universities, one finds marked differences. For one, they are different from the universities in size and endurance of tasks and the permanence of staff. They are different from the Max-Planck-Society in the size of facilities they operate and in closer relation to application of results. They are different from the Fraunhofer Gesellschaft in that they are less contract orientated and less subject to immediate control from industry by research money. In the particular circle of government, industry and science they play a very peculiar role in having cooperation with all three of them and being able to perform tasks which none of the others can do:

They can do larger science projects than the universities, at the same time go closer to it's application together with industrial partners, aiming at final application all of the time. Due to close relation to the government they can perform quasi governmental tasks like administration of official research and development programs etc. At the same time being subject to government steering regarding their programs, they can be and are used to fill research and development gaps.

DFVLR was founded formally in 1969, joining a large number of R&D institutions which have their roots as far back as 1907, when at Göttingen the famous Fluid Mechanics Research Institution of Ludwig Prandel was founded - a name which till today is proudly displayed by the Göttingen facility of DFVLR. Two other large units were the German Testing Center for Aircraft and the German Research Center for Aircraft, founded in 1912 and 1936 respectively. These together with several smaller institutions formed DFVLR. They were dispersed all over Germany, explaining the geographical structure which is shown in the map (5).

DFVLR works in the following fields:

- Airplane guidance and control and aircraft design are concentrated at Braunschweig.
- Fluid mechanics is located at Göttingen
- Remote sensing and telecommunication via satellite are concentrated at Oberpfaffenhofen; in addition there is located the German Space Operations Center, from which the spacelab was controlled during the D1-Shuttle mission, and there is the heart of our computer net joining all centers.

- Stuttgart concentrates on non-nuclear energy technology, in particular solar power and use of liquid hydrogene as an energy carrier; Stuttgart center is responsible for the rocket engine testing facility at Lampoldshausen.