

Walter Dittel GmbH – Postfach 101261 – 86882 Landsberg

Attachment as cover letter, to  
FCC OET  
Office of Engineering and Technology  
445 12<sup>TH</sup> Street SW  
Washington DC 20554

Telefon +49 - 8191 - 33 51 57  
Telefax +49 - 8191 - 33 51 70  
Email moessinger@dittel.com

December 12, 2001/M.

FCC OET  
Office of Engineering and Technology  
Laboratory Division  
Equipment Authorization Branch  
Mr. Steve Dayhoff  
7435 Oakland Mills Road  
Columbia MD 21046-1609

Copy: Ing. Werner Weiler, Walter Dittel GmbH, Head Aviation Products

**Reference Number 21390 (Mr. Steve Dayhoff)**  
**FCC Registration Number FRN 0004-9987-79**  
**731 Confirmation Number EA102416**

**FCC ID: BVYFSG90**

Dear Mr. Dayhoff,

As discussed with you by phone on December 11, 2001, attached please find files with schematic diagrams and Parts Lists, both for the 6 Watt and for the 10 Watt models of the basic design VHF/AM Transceiver models **FSG 90 (X)**.

As explained in our a.m. phone conversation, there is only ONE basic **FSG 90** design. The PC boards are identical, but inserted either side by side into rectangular (F Model) housings, or piggy back into the round front shape housings.

For your convenience, as a summary, below please find again a short scope of the slightly different equipment models.

**ALL** of the **total 48 MODELS** with identical basic design use **identical TX/RX PC boards**, except the control head PC board which is of different shape due to round and rectangular front / case dimensions.

24 models are called **FSG 90 (X)**. The (X) stands for the individual model identifiers.

Another 24 models are called **FSG 200 (X)** and are the identical OEM models without name DITTEL and WD Logo included on the equipment front panel.

**12 out of the 24 models FSG 90 (X)** cover the frequency range 118-136.975 MHz for any civil aviation use both airborne and on the ground.

**The other 12 models are called FSG 90E (X)** and employ just a few slightly different components and alignment to cover the extended frequency range 118 – 149.975 MHz which is **ONLY** for official military / governmental use. The **(E) (X)** means extended frequency range of these model variants

You indicated on the phone, that the FCC authorization by **FCC ID: BVYFSG90** will cover identical basic variants.

You also explained, that the basic equipment design is of interest to FCC. We discussed this in our phone conversation in more detail and achieved common understanding, that all models with "normal frequency range 118 – 136.975 MHz" will be therefore covered by the same **FCC ID: BVYFSG90**.

6 models are with 6 Watt RF power output, while another 6 models with **–H1** type identifier are the 10 Watt models. **(H1)** means high / 10 Watt RF power output.

Hereto we add the explanation, that our further 24 equipment models called **FSG 200 are technically exactly identical with FSG 90 (X)**, but are the **differently named OEM variants only**. This means, that they only do on the equipment front not include the name DITTEL and not the DITTEL WD Logo, besides appropriate model and part number identifier on the individual unit type label.

**This is to ask FCC for confidentiality of submitted diagram and parts data :**

The today forwarded many Form 731 attachments as \*.PDF consist of requested circuit diagrams (called SP...), as well as of appropriate parts lists (ST...). These files are separated into 6 Watt and 10 Watt RF power output models.

You will realize, that only the RF power output stage is slightly different using another / slightly higher gain RF PA transistor in exactly the same physical layout, plus its appropriate impedance matching components.

The test report which we already have submitted covers the worst case design / RF filtering of the 10 watt models (model identifier **–H1**) of the same basic RF board layouts.

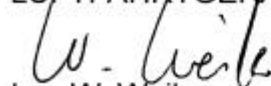
The wideband designed RF circuitry Tune-Up requires very little but appropriate efforts to verify necessary RF wideband performance using wideband RF sweeps.

We hope, that now all required data and information are submitted and the FCC Authorization may be granted, ideally the same FCC ID: BVYFSG90 for 12 models FSG 90 and another 12 models FSG 200 with 118 – 136.975 MHz, and with 6 Watt and 10 Watt RF power output.

If you need any further information, please let us know. Due to office absence of some key personnel, we will however only be able to respond from 07 January 2002.

Sincerely yours

WALTER DITTEL GmbH  
LUFTFAHRTGERÄTEBAU



Ing. W. Weiler                      i.V. Fritz Mössinger  
Head Aviation Dept.              Radio Projects

#### **Attachments**

Various \*.PDF files mentioned above with circuit diagrams and parts lists submitted separately as Form 731 attachments through electronic filing.