

## Mike Kuo

---

**From:** Mike Kuo  
**Sent:** Friday, April 15, 2005 11:22 AM  
**To:** 'Pat Bellett'  
**Subject:** RE: GroundProbe Pty Ltd, FCC ID: S49LMS, Assessment NO.: AN05T4691, Notice#1

Hi Pat :

I received your attachments. I will review these files shortly.

Best Regards

Mike Kuo  
Compliance Certification Services  
561F Monterey Road  
Morgan Hill CA 95037  
Tel: (408)463-0885 x: 105  
Fax: (408)463-0888  
<http://www.ccsemc.com>

---

**From:** Pat Bellett [mailto:pat.bellett@groundprobe.com]  
**Sent:** Friday, April 15, 2005 1:27 AM  
**To:** Mike Kuo  
**Subject:** FW: GroundProbe Pty Ltd, FCC ID: S49LMS, Assessment NO.: AN05T4691, Notice#1

Hi Mike,  
Can you please confirm that you have received the email below and the seven attachments (Email was sent Thursday, 14 April 2005 8:34 PM). I am concerned we may have a problem with the email server at our end.

Thanks,  
Pat

---

Pat Bellett  
Systems Engineer  
GroundProbe Pty Ltd

Phone: +61-(0)7-3010-8913  
Mobile: +61-(0)437-185-509  
Fax: +61-(0)7-3010-8988  
Email: [pat.bellett@groundprobe.com](mailto:pat.bellett@groundprobe.com)  
Web: [www.groundprobe.com](http://www.groundprobe.com)

---

**From:** Pat Bellett  
**Sent:** Thursday, 14 April 2005 8:34 PM  
**To:** 'MKUO@CCSEMC.com'  
**Cc:** Graeme Mitchell; Glen Stickley  
**Subject:** FW: GroundProbe Pty Ltd, FCC ID: S49LMS, Assessment NO.: AN05T4691, Notice#1

Dear Mike,

We are currently working through your list of questions. Please find the GroundProbe response in red text below each of the questions. Please also note that I have attached various files to this email. Please advise if these files need to be submitted via the webpage.

5/17/2005

Thanks in advance for your assistance in helping to resolve these issues for the FCC submission.

-----  
Pat Bellett  
Systems Engineer  
GroundProbe Pty Ltd

Phone: +61-(0)7-3010-8913  
Mobile: +61-(0)437-185-509  
Fax: +61-(0)7-3010-8988  
Email: pat.bellett@groundprobe.com  
Web: www.groundprobe.com  
-----

**Question #1:** Based upon proposed FCC ID label format, the proposed FCC ID number is S490305SSR01. However, the FCC ID number indicated on TCB application form is S49LMS. Please explain.

GroundProbe Response:

This was a mistake when we were filling out the online TCB Application Registration Form. The Equipment Product Code should have been entered as: 0305SSR01. This would have produced the correct FCC ID number: S490305SSR01.

**Question #2:** Please provide schematic diagram and functional block diagram.

GroundProbe Response:

1. We are uncertain of the level of detail required.
2. Can you please advise if the following attached files meet the requirements?
  - FCC Part15 Block Diagram Rev D.pdf
  - CE0013A\_CEB\_Block\_Diagram.pdf
  - CM0100\_2\_Block\_Diagram.pdf
  - CM0068A\_SSR\_Assly2.pdf

**Question #3:** Please provide internal photos and external photos of radio module .

GroundProbe Response:

1. Please find internal and external photos of both the REB (Radar Electronics Box) and the CEB (Computer Electronics Box) modules attached as two zip files
  - REB photos.zip
  - CEB photos.zip.
2. Please advise if further photos are required.

**Question #4:** In the request for confidentiality letter, Part 90 test report, part 15 Class A test report and Test plan summary are requested. Based on FCC policy, test reports can not be granted as confidential document and the information contained in test plan summary are general technical requirements. Please remove these three requests from your letter and submit revised request for confidentiality letter.

GroundProbe Response:

We will submit the confidentiality letter as requested ASAP.

**Question #4:** Please provide or indicate the location of files that contain information to address RF exposure compliance issue as indicated in page 17 of test plan summary.

GroundProbe Response:

We are currently working on this response and will get back to you ASAP.

**Question #5 :** Please provide theory of operation per section

5/17/2005

GroundProbe Response:

We are currently working on this response and will get back to you ASAP.

**Question #6:** Based upon the information provided in page 2 of test plan summary, the applicant has prior discussion with Steve Dayhoff at FCC. Please provide instructions from FCC in relating to this application.

GroundProbe Response:

We are currently working on this response and will get back to you ASAP.

**Question #7 :** As indicated in the proposed FCC ID label format, SSR contains Part 15 unlicensed transmitter ( FCC ID: 09PELPSS0D ) for remote communication from SSR to the remote office. The authorized antenna contains in FCC ID:09PELPSS0D is 2 dBi 1/2 wave dipole antenna which does not agree the antennas listed in Radio Link Installation manual. Please justify those antennas can be used with SSR system.

GroundProbe Response:

1. The information we have is taken from the ELPRO Radio Modem 905U-D Users Manual. It specifies that the maximum net gain of the antenna/cable configuration permitted in the USA/Canada is 6 dB. The gain of the antenna (in dBi) less the loss in the coaxial cable (in dB).
2. The manual also specifies that both Yagi and collinear antennas can be used - as mentioned in the GroundProbe Operators Manual - Radio Link Installation (Section OM-2).
3. This information appears to be inconsistent with the information you have provided from the FCC ID:09PELPSS0D documentation.
4. Is it possible for you to provide this FCC documentation for the ELPRO modems?

**Question #8** Based upon information submitted, there is no tune up procedure needed for this device. Please provide parts list for SSR system. Parts list is limited to the radio section. You may want to include parts list as confidential document.

GroundProbe Response:

1. We have a tune-up procedure for the up-converter in the REB (Radar Electronics Box), but this is unlikely to be what you want. Can you confirm?
2. Please find a copy of this procedure attached as T0040-E.pdf.
3. We had assumed the tune-up procedure referred to an operational requirement of the system and not a manufacturing requirement. Is this correct?
4. Is a parts list only required for the REB (Radar/Radio module)?

FYI : Technical review on Part 90 requirement has not yet finished.  
Please address above questions first.

Best Regards

Mike Kuo

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.

-----

5/17/2005

Pat Bellett  
Systems Engineer  
GroundProbe Pty Ltd

Phone: +61-(0)7-3010-8913  
Mobile: +61-(0)437-185-509  
Fax: +61-(0)7-3010-8988  
Email: pat.bellett@groundprobe.com  
Web: www.groundprobe.com

-----Original Message-----

From: Graeme Mitchell  
Sent: Thursday, 14 April 2005 1:57 PM  
To: Mike Kuo  
Cc: Pat Bellett  
Subject: FW: GroundProbe Pty Ltd, FCC ID: S49LMS, Assessment NO.: AN05T4691, Notice#1

Mike

Further to my earlier reply our Pat Bellett will be corresponding with you in regards to the details of your questions and also some clarifications.

Regards  
Graeme Mitchell

-----Original Message-----

From: Graeme Mitchell  
Sent: Wednesday, 13 April 2005 3:48 PM  
To: 'Mike Kuo'  
Subject: RE: GroundProbe Pty Ltd, FCC ID: S49LMS, Assessment NO.: AN05T4691, Notice#1

Mike

Thanks for the reply. We are now working on responses to these questions and will come back to you in the next couple of days.

Regards  
Graeme

-----Original Message-----

From: Mike Kuo [mailto:MKUO@CCSEMC.com]  
Sent: Wednesday, 13 April 2005 1:14 PM  
To: Graeme Mitchell  
Subject: FW: GroundProbe Pty Ltd, FCC ID: S49LMS, Assessment NO.: AN05T4691, Notice#1

Hi Graeme :

Please address the following questions

Best Regards

Mike Kuo  
Compliance Certification Services  
561F Monterey Road  
Morgan Hill CA 95037  
Tel: (408)463-0885 x: 105  
Fax: (408)463-0888  
<http://www.ccsemc.com>

-----Original Message-----

From: Compliance Certification Services [mailto:MKuo@ccsemc.com]  
Sent: Tuesday, April 12, 2005 8:13 PM  
To: Mike Kuo  
Subject: GroundProbe Pty Ltd, FCC ID: S49LMS, Assessment NO.: AN05T4691,

5/17/2005

Notice#1

Question #1: Based upon proposed FCC ID label format, the proposed FCC ID number is S490305SSR01. However, the FCC ID number indicated on TCB application form is S49LMS. Please explain.

Question #2: Please provide schematic diagram and functional block diagram.

Question #3: Please provide internal photos and external photos of radio module .

Question #4: In the request for confidentiality letter, Part 90 test report, part 15 Class A test report and Test plan summary are requested. Based on FCC policy, test reports can not be granted as confidential document and the information contains in test plan summary are general technical requirements. Please remove these three requests from your letter and submit revised request for confidentiality letter.

Question #4: Please provide or indicate the location of files that contain information to address RF exposure compliance issue as indicated in page 17 of test plan summary.

Question #5 : Please provide theory of operation per section 2.1033(c)(10).

Question #6: Based upon the information provided in page 2 of test plan summary, the applicant has prior discussion with Steve Dayhoff at FCC. Please provide instructions from FCC in relating to this application.

Question #7 : As indicated in the proposed FCC ID label format, SSR contains Part 15 unlicensed transmitter ( FCC ID: 09PELPSS0D ) for remote communication from SSR to the remote office. The authorized antenna contains in FCC ID:09PELPSS0D is 2 dBi 1/2 wave dipole antenna which does not agree the antennas listed in Radio Link Installation manual. Please justify those antennas can be used with SSR system.

Question #8 Based upon information submitted, there is no tune up procedure needed for this device. Please provide parts list for SSR system. Parts list is limited to the radio section. You may want to include parts list as confidential document.

FYI : Technical review on Part 90 requirement has not yet finished. Please address above questions first.

Best Regards

Mike Kuo

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.

5/17/2005