

FCC/TCBC Conference Call

July 18, 2006, 11AM Eastern Time

PARTICIPANTS:

FCC:

Rashmi Doshi	Federal Communications Commission
Joe Dichoso	Federal Communications Commission
Martin Perrine	Federal Communications Commission

TCB's:

Tim Johnson	American TCB
Doug Nobel	American TCB
Bill Graff	American TCB
Dennis Ward	American TCB
Sheri Myers	American TCB
Steve Hubbard	Bay Area Compliance Laboratory Corp.
Daniel Deng	Bay Area Compliance Laboratory Corp.
James Ma	Bay Area Compliance Laboratory Corp.
Samuil Lisimker	Bay Area Compliance Laboratory Corp.
Hans Mellberg	Bay Area Compliance Laboratory Corp.
Alan Binks	British Approvals Board for Telecommunications (BABT)
Hilton Carr	British Approvals Board for Telecommunications (BABT)
Andreas Herrmann	BZT-ETS Certification GmbH
Axel Mueller	BZT-ETS Certification GmbH
Joerg Kusig	BZT-ETS Certification GmbH
Karin Silberhorn	Cetecom GmbH
Gerald Schmidt	Cetecom GmbH
Joechim Seewald	Cetecom GmbH
Pete Krebill	Cetecom GmbH
Michael Klos	Cetecom GmbH
Steve Behm	CKC Certification Services
Randy Clark	CKC Certification Services
Chuck Kendall	CKC Certification Services
Thomas Jackson	Communication Certification Laboratory [CCL]
Barbara Judge	Compliance Certification Services
Mike Kuo	Compliance Certification Services
Yunus Faziloglu	Cutis-Straus LLC
Steve Cheng	Cutis-Straus LLC
Dan Crowder	Elite Electronic Engineering, Inc.
Mark Briggs	Elliott Laboratories
David Bare	Elliott Laboratories
Juan Martinez	Elliott Laboratories
Klaus Knoerig	EMCC Dr. Rasek
Eddo De Buhr	EMCC Dr. Rasek
Philip Littlewood	EMCC Dr. Rasek
Christoff Schmidt	EMCC Dr. Rasek
Roland Gubisch	Intertek Testing Services
David Schramm	Intertek Testing Services
David Chernomordik	Intertek Testing Services

Suresh Kondapalli	Intertek Testing Services
Liming Xu	MET Laboratories, Inc.
Marie Confroy	MET Laboratories, Inc.
Len Knight	MET Laboratories, Inc.
Kevin Mehaffey	MET Laboratories, Inc.
Dusmantha Tennakoon	MET Laboratories, Inc.
Russel Grant	Nemko Canada
Greg Kiemel	NorthWest EMC
Al Cirwithian	PCTest Engineering Laboratory, Inc.
Randy Ortanez	PCTest Engineering Laboratory, Inc.
Greg Czumak	PCTest Engineering Laboratory, Inc.
Steve Liu	PCTest Engineering Laboratory, Inc.
Bernd Selck	Phoenix Test Lab
Holger Bentje	Phoenix Test Lab
Hans Breevoort	Telefication Holland
Bert Vos	Telefication Holland
Bruno Clavier	Timco Engineering, Inc.
Eric Dobson	Timco Engineering, Inc.
Frank Denuzzo	Timco Engineering, Inc.
Judy Evans	TUV America
Bill Barry	Underwriters Laboratories
Bob Miller	Underwriters Laboratories
Jack Steiner	Underwriters Laboratories
Chris Harvey	Secretariat

Opening Remarks:

TCBC Fall 2006 Workshop will be at the Sheraton Inner Harbor , Baltimore, MD, October 2,3 & 4th, MTW... More information to follow soon.

Introductions

Attendees: Rashmi Doshi, Joe Dichoso, Ray LaForge, Bette Taube, Martin Perrine

Administrative Issues (Rashmi Doshi)

We are continuing to monitor the effectiveness of the new Exhibit Upload Procedure Changes that became effective June 27, 2006.

The procedures can be reviewed
at https://gulfoss2.fcc.gov/prod/oet/tcb/tcb_filing_changes_062306.pdf

Please remember:

In your e-mail request, always include the related EA#(s) along with the FCC ID
For a supersede request, please be clear 1) as to which exhibit folder(s) you are referring (i.e., schematics; manual, etc) and 2) as to which specific file within that folder you are referring.

Discussion: none...

Added New Interpretation

With regard to the L and M masks in Part 90.210, the rule indicates using a minimum RBW of 1% of the fundamental emission to determine the reference level and a minimum RBW of 1% of the fundamental to determine the mask skirts. The mask should be developed using the same resolution bandwidth throughout, for the reference level and the mask skirts. This interpretation was coordinated with the Wireless Bureau and the inquirer was asked whether the same RBW should be used or could different RBW be used so long as each was greater than 1% of the fundamental.

Three TCB dismissals (see attached)

A Combo transceiver operating under Part 22, Part 90 and Part 95(MURS) was incorrectly granted. Section 95.665(d) states "No transmitter will be certificated for use with MURS if it is equipped with a frequency capability not listed in Part 95.632." This rule prohibits combining MURS radio services with other services.

Discussion: Russell Grant, Nemko, this wording does not seem to be in the Rules. The FCC will take this offline and verify this wording.

Dan Crowder, agrees that 95.665 is 'reserved'

FCC follow up: The correct Section is 95.655(d) not Section 95.665(d). For further information, see the dismissal letter and the rulemaking referenced in the dismissal letter.

One filing was dismissed because compliance with the SAR limits could not be determined. In the same filing, the SAR probe calibration policy given in the last TCB conference was not implemented. Also, the details of the power measurements were not provided.

Discussion: Liming Xu asked about the policy. Randy Clark asked about which policy this was referring to... Joe will get back with the engineer and get the details to us.... Martin Perrine indicated that this was likely to be the 1 year vs. 2 year probe calibration cycle.

FCC follow up: The SAR DM issue was in regard to the probe calibration cycle time of 2 years rather than the expected 1 year.

One filing was dismissed as a request by the TCB because it required critical revisions to the Test Report and SAR report which rendered the filing unsuitable for Certification.

Russell Grant 95.665

Recent Dismissals:

June 30, 2006

Re: Application Received: 6/9/2006

Equipment Class: TNB-Licensed Non-Broadcast Station Transmitter

This E-mail is to inform you that this application is being Dismissed. The formal letter is being mailed.

Gentlemen:

The application for the above equipment is hereby DISMISSED pursuant to Section 2.917(a) of the Rules

for the following reasons.

This device is a combination transceiver designed to operate under Part 22, part 90, and Part 95 (Multiple User Radio Service (MURS)). Section 95.665(d) of our rules states: "No transmitter will be certificated for use with MURS if it is equipped with a frequency capability not listed in Part 95.632." (47 CFR §95.665(d)). Section 95.632 lists only the five frequencies specified for MURS service. This rule thus prohibits combining MURS radio service with other devices. This rule change was adopted in the Memorandum Opinion and Order and Second Report and Order in WT Docket No. 98-182, 17 FCC Record 9830 (1992). These rules have been effective since November of 2002.

June 27, 2006

Re: Application Received: 6/15/2006

Equipment Class: PCE-PCS Licensed Transmitter held to ear

Gentlemen:

The application for the above equipment is hereby DISMISSED pursuant to Section 2.917(a) of the Rules for the following reasons.

Compliance with SAR limits could not be determined. TCB SAR probe calibration policy was not implemented. Also Additional details of the power meter/spectrum analyzer settings used for power measurement are needed to assure that peak power was measured.

June 30, 2006

Re: Application Received: June 26, 2006

Equipment Class: PCE-PCS Licensed Transmitter held to ear

The application for the above equipment is hereby DISMISSED pursuant to Section 2.917(b) of the Commission's Rules.

This application is dismissed pursuant to TCB request due to critical revisions to the documentation after issuing the Grant of Equipment Authorization, including Test Report and SAR Report, which affect the suitability of this application for Certification as presented.

Miscellaneous

DFS update

The MO&O with the DFS procedure is on the measurements webpage.
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-96A1.pdf

Corporate TCB council inquiry (see attached). Please review.

July 20, 2006 deadline

For new, single filings for non-DFS UNII devices operating at 5.2 GHz....

TCB filings must be granted on or before the July 20, 2006 deadline.

EA filings must be submitted/filed on or before the July 20, 2006 deadline.

For composite filings that include non-DFS UNII devices operating at 5.2 GHz....

If both filings are TCB approved, they both must be granted on or before the July 20 deadline.

If both filings require FCC approval, they both must be filed on or before the July 20 deadline.

If one portion of the filing requires FCC approval and the non-DFS UNII portion is eligible for approval by the TCB(mobile and fixed) but cannot be granted until the FCC portion is approved, the non-DFS UNII can be granted after the July 20, 2006 deadline as long as the FCC portion of the composite is filed before the July 20, 2006 deadline.

Any composite in which the non-DFS UNII portion must be filed with the FCC, the non-DFS UNII portion must be filed before the July 20, 2006 deadline.

Permissive changes for UNII devices operating at 5.2 GHz.

Class II permissive changes can be filed for grandfathered devices (5.2 GHz devices approved before July 20, 2006) until the second deadline (July 20, 2007). Class II permissive changes after the second deadline (July 20, 2007) require compliance with the DFS requirements.

Devices must be approved and comply with the DFS requirements with either a new original authorization (new FCC ID) or a permissive change before the second deadline(July 20, 2007), or marketing and importation of the 5.2 GHz device without DFS must cease on July 20, 2007.

Discussion: Russell Grant at Nemko, we can still file a Class II Change until July 2007?
Rashmi, yes, according to above.

Mike Kuo, CCS, is change in ID for non-DFS allowed? Joe will try to respond in the minutes.

FCC follow up: A change in ID can be filed after July 20, 2006. However, please note that the device cannot be marketed or imported after July 20, 2007.

Mark Briggs asked about Grant Notes. Will there be a check list for TCB allowed TPC? Joe indicated that there is a check list incorporated in the DFS guide.

Tim Johnson, regarding the phrase 'on or before July 20th', are TCB's allowed to grant on July 20th? The FCC will double check this, but TCB's are likely not allowed to grant on July 20th.

FCC follow up: Except for a Change in ID filing and Class II permissive changes as noted above, TCBs cannot grant a non-DFS 5.2 GHz device on or after July 20, 2006, a 5.2 GHz device must comply with the DFS requirements on and after July 20, 2006.

Certification Output Power listing (See attached for details)

Power is in Watts.

In general, the output power listing should be in the same terms (EIRP, ERP) as listed in the rule part.

Conducted output power may be listed for certain cases.

At antenna connector (3 conditions) for listing conducted power.

PDCF (Pulse Desensitization Correction Factor)

For pulsed modulated device, (Non UWB devices), continuous operation of pulsed signals still require PDCF. For example, a 100% continuous burst signal requires PDCF. 100% transmission of CW signal does not require PDCF. Consider Fluid level measuring transmitters that use burst of nanosecond pulses. Operation at 100% continuous bursts still requires PDCF to be considered.

Clarification of policy for lanyards

The FCC policy stated in the RF exposure presentation of Oct. 2004, that devices with neck worn lanyards should be tested with 0 (ZERO) gap and body tissue liquid, is still valid. There is no small gap allowance for clothing that may be implied in the notes associated with the presentation.

Discussion: this does not apply to hand-lanyards.

Co-transmission and handover clarification for RF exposure purposes.

Some new portable telephones contain secondary modes of operation that allow handoff to a DECT, cordless phone, VOIP, or similar base station when the user is in the secondary's base region. This situation usually entails simultaneous operation of two transmitters. The current TCB exclusion list prohibits TCBs from reviewing co-transmission for these devices when the secondary power is over 5 mW. OET would like to clarify that in cases where such co-transmission is normally as a result of handover between two networks, and is typically fairly short (well under 30 seconds), for RF exposure purposes such transmission would not be considered as "co-transmission" for TCB exclusion list. TCBs therefore can review such filings. The TCB should treat each transmitter individually. Details should be provided of what the maximum handover time is and how the co-transmission is limited to this time.

Discussion: Randy Clark, wanted clarification about the handoff situation. Martin Perrine clarified that this is for just handoff between 2 different networks. Martin added that you can use the source-based-time-averaging to see if you are below the 5mW TCB exclusion.

Check for VOIP mode in phones for SAR evaluation

Many new portable phones contain WLAN transmitters that have typically been used in the hand or body worn positions only. VOIP services on the internet open up the potential for VOIP calls from the phone over the WLAN. In some cases the VOIP service may be totally controlled by an independent internet site. It may not be clear if a particular phone design would prevent this usage such as through microphone turnoff during WLAN use. We caution TCBs to look for VOIP modes in phones that contain WLAN transmitters. We advise applicants to clearly state how VOIP modes are prevented in the device unless this usage is evaluated. Generally VOIP modes would require SAR evaluation at the ear.

Discussion, if the mic is disabled during WLAN, this would prevent VOIP.

HAC T-coil review training for TCBs. (See attached)

Please review the first two HAC T-coil grants for TCB study.

EA604474, FCC ID: O6Y-CDM7075A

EA635100, FCC ID: IHDT56EL1

Discussion: Martin Perrine, caveat, not Certified in accordance with TCB procedures, look at the information in detail, this is for reference.

Martin went over the Updated HAC Presentation one page at a time. The word NEW is added on new information. To bring TCB's up to speed on 2006 procedures. TCB's should be able to review T-Coil testing at the conclusion of this training on the phone today.

- Public Notice DA-06 accepts an updated standard version 2006 (3.12)

FAQs for Hearing Aid Compatibility Scenarios

FCC Rule Part: 47 CFR section 20.19.

Measurement standard: ANSI C63.19

Date: 24 April 2005 updated 18 July 2006

Scenario/issue	FCC Guidance
Phone has user extendable antenna	If tested only in extended position user guidance should be provided.
Body of device has multiple positions e.g. slider	Should comply in all normal user configurations for at ear use.
Reduced RF power or limited capability on protocol of air interface for HAC mode	Not allowed
HAC software mode, e.g. turn off back light, BT off, or similar.	Generally allowed but user must be informed. Should not disable basic phone capability.
Changeable but integral HAC parts, e.g. HAC face plate with meta-material and relocated audio output.	Allowed, but not if installable by the user.
External HAC attachments, e.g. leather pouch with remote telecoil.	Seek FCC advice prior to certification.
Bluetooth or Wireless LAN composite transmitters	Allowed to turn off for HAC use. Must inform user of this limitation. RF Evaluation of simultaneous transmission modes should be submitted to the FCC.
Do VOIP modes require Part 20.19 HAC compliance	Only required if VoIP mode is supported over the data connection of the CMRS networks.
Phones with multiple air interfaces	Must comply for all digital modes for use at the ear. Subset approval for HAC requires a new FCC ID with the mode disabled. TDMA modes in most cases are waived.
Tcoil away from the speaker	Allowed but should allow a normal usage position.
Evaluation of use positions other than held-to-ear i.e. data only modes, and voice modes with speaker phone or headset	Testing and rating not required. The rating only applies to held-to-ear usage.
Bystander interference measurements. (European standard)	No FCC requirements. Held to ear compliance is felt to be more stringent.
Special grant information	Use grant note code HC, and add "HAC Rating: M# T#"
Adding or changing a rating	Both RF emission rating and T-coil rating must use the same version of the standard. Retest as necessary
User selectable mode for T-coil frequency response equalization.	If implemented control should be as simple and quick as possible. User instructions must be provided. Submit filing to FCC.

Discussion: Bill Graff, indicated that you have presented a lot of information. Bill would like to defer his questions until the next conference call so that we can digest this information. Can we further discuss this on the next call? Rashmi indicated he wanted to get this information into the hands of the TCB's.

Russell at Nemko, can TCB's review for HAC, or must this go through with FCC. Martin indicated that TCBs can review if they are prepared.

Rashmi indicated that ANSI C63 is putting together a training module, web based, for measurements per C63.19:2006. This C63.19 TCB training presented today will be

Additional follow up: For the purposes of TCB market surveillance, HAC Testing will be part of the 2% rule.

DFS Questions & Answers:

General:

The Government - Industry (ITAC-R) group has worked very closely to develop the test procedures for DFS to be applied to devices operating in the 5250 MHz to 5350 MHz and 5470 MHz to 5725 MHz (NII) bands. As a part of the agreement the several US Government agencies required that the FCC closely monitor the implementation and certification of devices which are subject to the new requirements. It was agreed that the FCC Laboratory will evaluate and test all the devices which incorporate "radar detection functions" prior to issuing a grant of certification. Thus any device (either operating as master or client) which has a radar detection function, must be tested for compliance by the FCC.

The current procedure for applications to the FCC will be similar to all the others where "pre-grant" testing is required. Thus, the FCC must receive a completed application with all the exhibits properly uploaded. Once the exhibits including test reports are reviewed for completeness, the FCC will request samples for testing. The processing of applications will be done on a "first-come first-served" basis. A grant of certification will only be issued once the sample testing is finished by the FCC. If the submitted application has either used procedures with variations or included characteristics which were not initially considered, the review may require further consultation with other US Government agencies. This may result in additional processing time.

The same review procedure will apply for new applications or permissive changes which require addition of the function. The proposed procedure applies to all devices which incorporate radar detection functions which control dynamic frequency selection operation. This would typically cover all access points which act as masters, as well as any clients which may occasionally operate as masters or modules which may be programmed to operate in either modes. Further any client devices which enable "ad-hoc" or "peer to peer" modes also must have radar detection functions or else disable the "ad hoc" or "peer to peer" modes in the appropriate bands.

TCBs can approve devices without radar detection functions, unless the submission to the FCC is necessary for other reasons (for example, evaluation of RF Exposure data for above 3 GHz operation). The devices approved by the TCBs must clearly demonstrate that they perform channel move procedures as required by the rules. The test report must clearly include the FCC ID of the master device with which the tests were performed. Thus, the TCBs must not approve devices without radar detection functions until the specific master device that it was tested with is approved. In addition, as noted above, any "ad hoc" or "peer to peer" operations must be evaluated. While no specific test procedures are recommended, the applicant must provide a clear attestation to meeting this requirement. The User manual and /or operations manual should be reviewed for this purpose. For applications submitted to the FCC only as a result of RF exposure evaluation requirement, there will not be any requests for "pre-grant" sample testing. The current procedures continue to apply.

The FCC and US Government recognize that the proposed procedures will create challenges for everyone and we plan to move expeditiously in processing all the applications. We cannot commit to any specific timeline. Currently, the FCC has been processing 90% of applications in less than 50 days. This assumes that the application has no major issues. We are encouraging all the potential applicants to start the process as soon as possible.

Specific responses:

a) Will FCC review & grant cert for DFS C2PC submissions first, then ask for audit samples for DFS testing in the lab? Or will you ask for audit sample and do testing as part of the review (and Not issue Grant until after audit testing is finished to your satisfaction)?

As discussed before, the FCC will review, conduct tests and then issue a grant. The sample testing is part of the review and grants will only be issued after the testing is completed.

b) Will answer be any different for APs vs. Client devices?

There is no difference between devices having radar detection functionality. If the client device does not have radar detection functions, a pre grant sample will not be requested. The current application review guidelines will continue to apply.

c) Will FCC have a committed or target turnaround time to keep within for the audit testing done at your lab?

At the present time there is no plan for a fixed turnaround time.

I hope that this clarifies our present plans.

Rashmi Doshi, PhD Chief, FCC Laboratories

Question and Answer Period:

Name: Hilton Carr,

Question: CDMA handset, operates 806-821MHz, can not find a location in the Rules. Rashmi indicated that this is the Public Safety band. This is probably not allowed. Please send more details in KDB.

Name: Greg Czumak, PCTest

Question: I sent a request to EASTech, 3 weeks ago, but did not receive final response. Will there be an expiration date on Grants issued under the HAC waiver...Is there a chance of getting an official response?

Rashmi will respond to the e-mail. If there are permissive changes to an HAC waiver Grant, then the waiver will no longer apply.

FCC follow up: Greg's inquiry and response is as follows.

- 1. Please confirm that the 850MHz band Waiver under WT Docket 01-309 (FCC 05-166) will remain valid after the deadline on Aug. 1, 2006. In other words, is a device that was issued a grant under the Waiver required to comply with the new HAC emissions limits for 850GSM (ANSI C63.16(2006)) after Aug. 1, 2006?**

The waiver exempting dual band GSM devices from compliance with HAC limits in the 800 MHz band will expire on Aug. 1, 2006. However, for certification purposes devices approved under the waiver will not have to be retested to demonstrate compliance with the new standards, unless there is change in the device which require a permissive change filing that impacts the HAC rating, as discussed below.

- 2. Are manufacturers required to re-label their products (originally granted under the Waiver) after the Aug. 1, 2006, deadline, if they have found that a particular model does not comply with the HAC limits for 850MHz GSM under the new ANSI C63.16(2006)?**

If a device requires permissive changes, for example to add rating for magnetic coupling, the device must be retested with the appropriate standard to ensure continued compliance for both RF emission and magnetic coupling. The device can be tested under ANSI C63.19 (2006) for both RF emission and magnetic coupling. If the M rating changes, then the new rating should be displayed. If the device was approved under the waiver and the applicant wants to add the T rating using the ANSI C63.19 (2005), or there are other permissive changes that may affect the HAC ratings, please consult the Commission for further guidance.

Question #2: Regarding the 5mW exclusion, any possibility of getting rid of the 5mW exclusion (pending Rulemaking).

Rashmi: Right now there is no movement on the RF Exposure Rulemaking.

Name: Hans, BACL

Question: device has possibility of 2 different modules inside; customer would like to label the outside as one of the following 2 ID's. Is this acceptable?

FCC follow up: No, the label must correctly indicate only the installed module.

Rashmi asked that this be sent in writing.

Conference call concluded at 12:32 PM. Next conference call on August 8, 2006 at 11:00 am eastern US time.