

Via Electronic Filing
January 21, 2011

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
Establishment of a Model for Predicting)
Digital Broadcast Television Field Strength) ET Docket No. 10-152
Received at Individual Locations)
)
)

Re: Submission of COMMENT

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Madam Secretary:

Givens & Bell, Inc. hereby submits this set of files, submitted as Comment regarding the Further Notice of Proposed Rulemaking section of the Report and Order and Further Notice of Proposed Rulemaking, (the FNPRM), FCC 10-194, Released November 23, 2010 and published in the Federal Register on December 22, 2010. The files are submitted in regard to the invitation for submission of additional information found in paragraph 58 of the FNPRM.

Sincerely yours,



Sidney E. Shumate, President
Givens & Bell, Inc.
1897 Ridge Rd., Haymarket VA 20169-1306
sid@givensbell.com

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Establishment of a Model for Predicting)	
Digital Broadcast Television Field Strength)	ET Docket No. 10-152
Received at Individual Locations)	
)	
)	

COMMENT

Givens & Bell, Inc. hereby electronically submits this set of files, submitted as invited Comment regarding the Further Notice of Proposed Rulemaking section of the Report and Order and Further Notice of Proposed Rulemaking, (the FNPRM), FCC 10-194, Released November 23, 2010 and published in the Federal Register on December 22, 2010.

The attached files include two c++ source code files to which a .txt extension has been added for filing purposes. The first file, the ITWOM3.0.cpp.txt file, when the .txt extension is removed, is a drop-in replacement for the itm.cpp file used in the open source SPLAT 1.2 series of wrap-around software. The second source code file, ITWOM3.0t.cpp.txt, is the test set from which the results in the attached Excel worksheet, "ILLR vs ITWOM Test for 3.0t.xls", were obtained when run with Givens & Bell's LORIS wrap-around software. The worksheet presents the consolidated results of the FCC ILLR tests best results, obtained with the ITM-based ILLR model, as compared to the results obtained with the ITWOM 3.0 basic international model, which utilizes an average clutter height and density. The input interface to allow ground clutter height and density input derived from the ILLR ground cover data exists in the in the 3.0t version, but it has not yet been interfaced and tested with the ILLR ground clutter data.

The remaining files include papers and a documentation file explaining the inner workings of the associated c++ source code subroutines provided, including the theory and by line of code, and the scientific basis on which the corrections, modifications and

deterministic approximations are based. The documentation file is a collection of ongoing draft manuscript documents, so the code line numbers stated have changed, but these represent the most current existing documentation for each subroutine within the set of subroutines provided. The subroutine discussions are in alphabetical order, except for the last section, which discusses the original ITM files not modified.

As promised in the Petition, this source code is a dual version. In the 3.0 source code it is functional as the newer ITWOM version by calling to subroutine `point_to_point`, and the original ITM version by calling to subroutine `point_to_pointITM`.

This was necessary in order to make it drop-in compatible with SPLAT for independent use and testing. The test version 3.0t operates as the ITWOM with a call to `point_to_point_two`, and as the older ITM version with a call to `point_to_point`. The two 3.0 versions incorporate the latest improvements as of October 21, 2010. Further development of the c++ version was continued up until recently, but the additional improvements attempted did not provide better results.

A FORTRAN port of this version, utilizing and modifying the current published source code utilized by the FCC to provide a ITWOM-based set of subroutines compatible with the current FCC FORTRAN ITM-based software, is in progress, and is scheduled to be submitted, with recommendations regarding the interface to the FCC's ILLM ground clutter data, and additional documentation as appropriate, as reply comment on or before Feb. 7, 2011.

I, Sidney E. Shumate, as President of Givens & Bell, Inc. therefore do reaffirm G&B's Petition as submitted to the Commission, and present these files with regard to the invited submission of additional information and source code mentioned in paragraph 58 of the FNPRM.

Sincerely yours,

A handwritten signature in black ink that reads "Sidney E. Shumate". The signature is written in a cursive style with a large, stylized initial 'S'.

January 21, 2011

Sidney E. Shumate, President
Givens & Bell, Inc.
1897 Ridge Rd
Haymarket, VA 20169