



IN THE CIRCUIT COURT OF OHIO COUNTY, WEST VIRGINIA

**IN RE: TOBACCO LITIGATION
(Individual Personal Injury cases)**

**Civil Action No. 00-C-5000
(Judge Arthur M. Recht)**

ORDER

On Monday, October 10, 2011, at 10:00 A.M., pursuant to a notice of telephonic hearing filed Friday, October 7, 2011 (and served by the emplaced electronic notice established herein) for disposition of Defendant's Motion Relating to Multi-County Jury Selection (also served on Friday, October 7, 2011) the parties appeared by counsel. Upon review of the motion (without an opportunity for plaintiffs' response) and the argument of counsel, the court finds:

1. The order entered herein on July 1, 2011 reflects on its face that a finding was made that "sufficient jurors cannot be conveniently found in the county in which the trial is to be held to wit-Ohio County pursuant to 52-1-14 (b)."
2. The finding that such selection in Ohio County "cannot be conveniently found" was made by the court premised on the facts apparent and available, and such finding was not challenged by any party.¹
3. Attendant to such finding and the further directions of the court, potential jurors from Ohio County and its contiguous neighbors-Brook and Marshall Counties-were properly summoned and joined in a "jury pool" as set out in W.Va. Code 52-1-14 (d).

¹ A motion to alter or amend an order under the auspices of W.Va. R.Civ. P. 59 (e) has often been employed in this proceeding to challenge an entered order. None was offered.

4. Broad discretion is given the presiding judge by the rules of Mass Litigation in the mechanics and substantive logistics of jury selection as directed by Trial Court Rule ~~28.08~~ ^{26.08} Powers of the Presiding Judge:

(e) The Presiding Judge shall have the sole authority to supervise the jury selection process, to disqualify a prospective juror from jury service, and to excuse jurors from juror service in Mass Litigation to which the Presiding Judge has been assigned, all pursuant to W.Va. Code 52-1-1 *et seq.*²

5. The unique aspects of jury selection in this proceeding became apparent in the earlier attempt to impanel a pool in Kanawha County. As a result, when the court became aware that the initial responses from Ohio County with respect to potential jurors involved an inundation of requests for excuse from service, the statutory procedure of W.Va. Code 52-1-14 was invoked without dissent from the parties.
6. That procedure does not involve a prohibition of pooling the candidates from other counties with those from Ohio County for the randomization necessary for final selection nor does it require a hierarchy of juror panel exhaustion before such joint randomization.

² This amendment to the rule was adopted April 15, 2010 after the first attempt to assemble a qualified jury in this action in February, 2010.

Cases cited in defendants' motion interpreted W.Va. Code 52-1-20, a predecessor to the current provision which had application only to criminal cases with the distinct jurisprudence attached as to the venue of jury selection and variances. Even then the decision to seek panel pool members outside the basic jurisdiction was vested in the discretion of the trial judge. See State v. Gray, 187 W.Va. 283, 418 S.E. 2d 597 (1992). The present version of the contiguous county reaching (W.Va. Code 52-1-14) upon enactment became effective June 5, 2008 and includes the provisions specifically applicable to cases "referred to the Mass Litigation Panel" as candidates for the litigation of the normal jury pool.

7. By letter with enclosure of October 10, 2011, the court has approved a detailed process in order to generate the jury panel herein. A copy of that letter and enclosure is attached hereto, made a part hereof, and is an order of this court.

THEREFORE, it is hereby ORDERED the relief requested in Defendants' Motion Relating to Multi-County Jury Selection is DENIED.

As directed by R.C.P. 46 the exceptions of respective parties to all rulings of the court adverse to their position are here noted and preserved to the extent that at the time of the ruling it was made known to the Court the action such party desired the court to take or the objection to the actions of the Court and the grounds therefore.

All of which is ORDERED *nunc pro tunc* as of October 10, 2011.

Defendants Objection is Preserved

ENTER:

October 24 2011

[Signature]
Arthur M. Recht, Judge

PRESENTED BY:

/s/ Timothy N. Barber
Timothy N. Barber (WVSB#231)
P.O. Box 11746
Charleston, WV 25339
(304) 744-4400

STATE OF WEST VIRGINIA
FIRST JUDICIAL CIRCUIT
OHIO COUNTY COURTHOUSE
WHEELING, WEST VIRGINIA 26003



ARTHUR M. RECHT
JUDGE

TELEPHONE
304/234-3794

FAX
304/234-3866

October 10, 2011

VIA FACSIMILE ONLY

Timothy N. Barber, Esquire
Facsimile Number: 304-744-6055

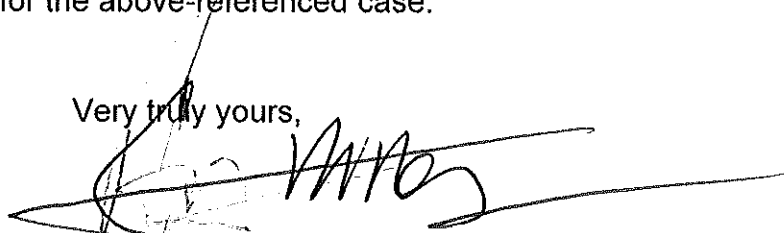
Pamela Campbell, Esquire
Facsimile Number: 304-345-9941

Re: Tobacco Litigation - Personal Injury Cases

Dear Tim and Pam,

Attached is the detailed process that the Clerk of the Circuit Court of Ohio County will generate the jury panel for the above-referenced case.

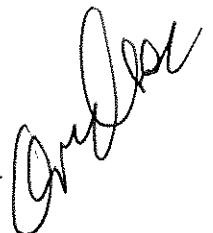
Very truly yours,


ARTHUR M. RECHT

AMR:nc

Tobacco - Mass Litigation Jury Pull

1. Ohio, Brooke and Marshall Counties all use the State of WV juror selection software;
2. Mass Litigation - Supreme Court Order - Pull jurors From Contiguous Counties;
3. Judge Recht Order on number of jurors to pull from each County for mass litigation trial;
4. Each County did a random pull from their "Master List" of Jurors for the number specified by Judge Recht; The Master List is a combination of Drivers License names and County Voter Registration Names for each County;
5. Each County sent a "Color Coded" jury questionnaire to the Random pull of these jurors; (All names sent to SuperMail Who printed, color coded by County, and mailed to individuals)
6. Each County Circuit Clerk received their questionnaires back and entered all juror information into their computers;
7. Judge Recht's Order For Normal Circuit Clerk Disqualifications: Age, Medical, Non-resident, Non-citizen, full-time students, etc. All these jurors disqualified each County;
8. We now have a "Good" juror list for each County;
9. Judge Recht sent out "special" questionnaire to all "good" jurors from each county; (By Supermail)
10. All "Special" questionnaires returned to Judge Recht;
11. Ohio County Circuit Clerk's Office alphabetized all And had all "special" questionnaires AND "color coded" Questionnaires scanned into computer for distribution to Attorneys;
12. Received Agreed Disqualification Lists from Attorneys;
13. Each County Circuit Clerk then disqualified those jurors in their county;
14. After all disqualifications made in each County, All "Good" juror information pulled from Brooke and Marshall Counties and given new "Bar Code Numbers" that do not Conflict with Ohio County since that is the home County

A handwritten signature in dark ink, appearing to be 'C. J. Smith', is written over the bottom right portion of the list, specifically over item 14.

Where all information will be lodged for random selection;

15. The information from Brooke and Marshall County will then be input into the Ohio County Master List of "good" Jurors for the Tobacco Mass Litigation;
16. Once all the information is uploaded to Ohio County's juror Selection program, it will all be **randomized** for future Juror selection;
17. Using Judge Recht's list of designated trial days, the Ohio County Circuit Clerk as the Summoning Clerk, will Then put the **dates** into the computer Jury Selection Program and the **number** of jurors needed for each selected Day and time (date and a.m. or p.m.) The computer will **Automatically Randomize** all the "Combined juror information" And print out a random list for the number Selected. **There is absolutely no manual selection of jurors. Each time a date and time is entered, the computer Will automatically re-randomize the jurors in the pool Before selection;**
18. After the computer selects and prints the random list, We will then print out an alphabetical list for Nancy To send out the letters to those jurors telling them The date and time to appear.
19. On the day of juror selection, the jurors will be checked In by the clerk and mileage taken for reimbursement;
20. Voir Dire will be conducted and those excused that day will Be marked off in the computer as excused as a potential Juror for this trial;
21. After jury selection is done, the six jurors and alternates Will be seated for the trial.



JURY SYSTEMS
I N C O R P O R A T E D

JURY+ *Next Generation*

Universal Random Generator

Detailed Design & Functionality

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1. Introduction

This document describes the theory and structure of the random number generator that is used by the JURY+ Jury Management System to perform those jury management business functions that require randomization.

The random number generator employed by the JURY+ software is the "Universal" generator which appeared in an article written by George Marsaglia and Arif Zaman who are part of the "Supercomputer Computations Research Institute and Department of Statistics" at The Florida State University, Tallahassee. Also contributing to the article was Wai Wan Tsang a member of the "Department of Computer Science" at the University of Hong Kong.

The article (titled: "Toward a Universal Random Number Generator") is included in its entirety as an appendix to this document.



2. The Definition of the Universal Random Number Generator

The Universal generator algorithm is a combination of a Fibonacci sequence (with lags of 97 and 33, and operation "subtraction plus one, modulo one") and an "arithmetic sequence" (using subtraction).

It passes ALL of the tests for random number generators and has a period of 2^{144} and is completely portable (gives bit identical results on all machines with at least 24-bit mantissas in the floating point representation).

The Universal random number generator employed by Jury Systems Incorporated in its JURY+ application software is a true, exact implementation of the algorithm defined in "Toward a Universal Random Number Generator" and thus all randomness tests for that process published in statistical literature applies to the JURY+ implementation.



3. Development of the Universal Random Number Generator

In June 2006, the Florida State AOC required that all randomization for purposes of jury selection be accomplished using the Universal Random Number generator described in an article titled "Towards a Universal Random Number Generator" by George Marsaglia. The Universal Generator is a combination generator. It combines two different generators, the first of which takes two user seed values, converts them into 4 seed values and generates a sequence of 97 random numbers. These number become "seed" values for the second random generator which uses them in a combination process to combine the series of random numbers, producing a "Universal" value.

Previously, Jury Systems Incorporated used the "Marsaglia" random number generator which is a feedback shift register (FSR) method to generate uniform random numbers between 0 and 1, inclusive. The method was named for and based upon the idea of George Marsaglia (1965) who developed a coupled random number generator called super duper. Super duper couples a multiplicative-congruential generator with an FSR generator. This generator was subjected to extensive testing by Rand Laboratories and shown to pass all randomness tests for all sample sizes likely to be encountered in the JURY selection process. This routine is a 2-seed routine, in that each number in a random sequence is provided based on two seed values.

Using the referenced article and a published C-language implementation of the Universal random generator (both of which are included as an appendix to this document), Jury Systems Incorporated created a version of the routine for integration into its JURY+ application for use in Florida and any other site that may desire it. The JSI implementation was done in August of 2006 and is a COBOL version of the routine. A copy of the JSI implementation is also included in an appendix.



4. JURY+ use of the Universal Random Number Generator

Wherever randomness is requisite in the JURY+ application, the Universal generator is employed. Those application functionalities include the following:

- Source List Processing
When source lists are processed to supply juror names to JURY+, each member of the list is assigned a random number. The list is then sorted by the random number (known as a Juror Identification Number - JID) and the first 'n' records are selected per client requirements.
- Juror Summoning
When it is necessary to summon jurors to a specific court and date, the full set of eligible jurors is assigned a random number. The list is sorted and the first 'n' number of jurors are selected.
- Panel Selection
When requests for juror panels are received at the assembly room, the user initiates a computer program to create a panel of the requested size. The computer program provides a randomly ordered list of jurors available for service at that moment.

Each juror in the pool is assigned a random number. Once all jurors have thus been assigned a temporary unique number, the list is ordered by that number. Once the panel jurors are selected from this list, the panel jurors are re-randomized and a Case Information Sheet listing them is produced assuring that each juror has an equal opportunity to be the first seated for voir dire.

- Reporting
Many of the JURY+ reports allow the user to select list of jurors that re ordered randomly.



5. Logic Specifications for the Universal Random Number Generator

The Universal Generator is a combination generator in that it combines two different random generators to provide a random series that passes every randomness test. The principal component of the two has a very long period, about 10^{36} . It is a lagged-Fibonacci generator based on the binary operation x times y on reals x and y .

The Fibonacci generator has an extremely long period and appears to be suitably random based on results of stringent tests that were applied to it. However, there is one test which it fails: the "birthday-spacings test. In order to get a generator that passes all of the stringent tests the first generator is combined with a second generator.

The choice of the second generator is a simple arithmetic sequence for the prime modulus $2^{24} - 3 = 16777213$.

Detailed information regarding the theory behind the Universal Random number generator is provided in the published article included as appendix C of this document. The article provides a Fortran language version of the algorithm.

Sometime after the original article appeared, the Fortran program was converted into a "C" programming language implementation and published. The "C" version is included as an appendix to this document.

For implementation into JURY+, JSI developed a COBOL language implementation of the Universal generator by duplicating the logic published in the "C" program. The JSI version is also included in an Appendix to this document.

To the greatest extent possible, the variable names used in the JSI version directly correspond to identically named variables in the "C" implementation. This makes the comparison of the two sets of logic much more straight forward.

A review of the "COBOL" version shows that there are two entry points (distinct processes) in the Universal Algorithm. The first entry point is a routine "1000-set-seeds" (this corresponds to the subroutine called "RMARIN" in the "C" version).

The 1000-set-seeds routine implements the "first" random generator in the Universal process. Using two seed values supplied by the user, it creates four seed values and uses them to create a Fibonacci sequence of 97 random numbers. This series of random numbers is used in the creation of the Universal random number.

Additionally this routine creates a representation of a second sequence (initially set to 362436/16777216 and referenced by variables "C", "CD", "CM"). The Fibonacci series and this series are combined (in the random number generation routine below) to create a Universal Random number.



The second routine is 2000-Gen-Rand (this corresponds to the "RANMAR" routine in the "C" program). This routine generates a Universal Random number by combining the two sequences (series) set up in the 1000-set-seeds routine.

First, two entries from the Fibonacci series (referenced with variables "I" and "J") are subtracted from each other, (the first time a Universal random number is requested the two entries referenced are 97 and 33 respectively) giving the basis for our Universal random number.

After the basis calculated, it replaces the Fibonacci number referenced by "I" (in preparation for the next time a universal number is needed). Then, both references ("I" and "J") are decremented. When either of the reference indicators ("I" or "J") reach zero, they are reset to their initial value (97 and 33 respectively). Thus the series of 97 numbers is processed in a circular fashion. (All of this is in preparation for the next request for a Universal random number).

Finally, the next number in the second series (which was initialized in 1000-set-seeds and are represented by variables "C", "CD", and "CM") is computed and combined with the basis random number (via subtraction). The result is returned to the calling program as a "Universal" random number.



6. Validation of the Universal Random Number Generator

As indicated in the "Towards a Universal Random Number", the statistical "randomness" of this routine has been thoroughly tested and documented. It is also clearly explained that an appropriately coded algorithm, regardless of the language it is written in or the computer it is executed on, produces exactly the same "random" sequence when given identical seed values.

Thus, the validation (and thus proof of randomness) becomes one of showing that two different implementation produce the same known results when given appropriate seed values.

The JSI implementation produces the same results as the program on which it was modeled. The "C" version of the program indicates the following test to insure a properly functioning Universal random number generator algorithm:

```
Use IJ = 1802 & KL = 9373 to test the random number generator. The
subroutine RANMAR should be used to generate 20000 random numbers.
Then display the next six random numbers generated multiplied by
4096*4096
If the random number generator is working properly, the random numbers
should be:
        6533892.0   14220222.0   7275067.0
        6172232.0   8354498.0   10633180.0
```

These are exactly the results produced by calling the JSIRAND1 routine with seed value 1082 and 9373 and viewing the 20001 through 20006th random numbers..



**I. APPENDIX A - The Universal Random Number Generator Program
(C-Language Version)**



II. APPENDIX B - The JSI Implementation of the Universal Random Number Generator (COBOL-Language Version)



III. APPENDIX C – Toward a Universal Random Number Generator By George Marsaglia and Arif Saman