# THE SECRET CITY JUNEAU Secret City Oak Ridge, Tennessee

December, 2012 Volume 1, No 1

#### During WWII, The Army acquired 59,000 acres of East Tennessee land: a site approximately 17 miles by 9 miles. Within that site, a "Secret City" was laid out: 7 miles by ½ mile.

- The Army hurriedly constructed 200 miles of city streets. No "blocks" or "squares" could be used, because of local topography.
- Oak Ridge was the first (and by far most expensive) of the Manhattan Project sites.
- This city grew from zero to 75,000 residents in only 2½ years—under Army control—in <u>total</u> <u>secrecy</u>.
- After the war, Oak Ridge became the first public school system in the South to desegregate.

#### In this issue:

First Oak Ridge **2** Holiday Message

ORHPA Heritage **3** Gifts

This Month in 4 Manhattan Proj. History

Author's Corner 4

Heritage 5 Crossword

#### Oak Ridge Heritage Tour Guide Released

The Oak Ridge Convention and Visitors Bureau unveiled a brand new pocket-sized heritage tour guide of historic Oak Ridge.

Oak Ridge Heritage and Preservation Association

The 35-page guide contains a detailed driving-tour of heritage sites within the community—and

Ridge Heritage

Radio Heritage

Number of Oak Ridge, Tennessee Ten

Oak Ridge Convention and Visitors Bureau

Www.OakRidgeVisitor.com

New 35-Page Tour Guide

numerous amazing facts and historic photographs. The Guide was written by ORHPA member Martin McBride—assisted by several long-time Oak Ridge residents and ORHPA members.

Oak Ridge was the largest of three secret cities created by the Army Corps of Engineers during World War II's topsecret Manhattan Project. The goal of this massive project was to build the world's first atomic bomb. Oak Ridge served

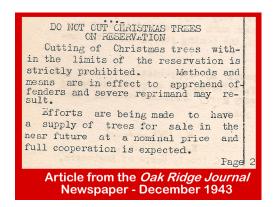
as the administrative headquarters for the project.

"People come into the Oak Ridge Welcome Center all the time and want to know what to see and visit," said Katy Brown, President of the Convention and Visitors Bureau. "This guide will help them see the historic World War II sites within our beautiful city."

A hundred thousand workers were brought to Oak Ridge during World War II to build and operate three large Oak Ridge nuclear sites. Oak Ridge's principal task was to separate a rare form of uranium (called uranium-235) from naturally-occurring uranium on a large scale—in time to help end the war.

Many of the world's leading scientific experts thought the task impossible. Yet, the people of East Tennessee accomplished it.

('Tour Guide,' continued on page 3)





#### Annual Meeting and Election of 2013 ORHPA Officers

The Oak Ridge Heritage and Preservation Association will hold its annual elections on Thursday, December 13, 2012 at 6 PM.

The ORHPA nominating committee, chaired by Bill Wilcox with members Donna Bennett, Gordon Fee, Rick Lusk, and Ray Smith, is recommending 10 candidates for election to the Board.

The candidates include: Donna Bennett, Wendy

Bishop, Ellen Boatner, David Bradshaw, Mike Bradshaw, Don Forester, Tim Gawne, Rick Lusk, Bobbie Martin, and D. Ray Smith.

Five other Board members will continue to serve out their elected terms. Continuing on the Board will be: Margaret Allard, Betty Stokes, Mick Wiest, Amy Seiber, and Tara Voit.

A Pot-Luck dinner is also planned.



December, 2012

# Oak Ridge Heritage and Preservation Association

102 Robertsville Rd.
Oak Ridge, TN 37830
President@OakRidgeHeritage.com

<u>President</u> David Bradshaw

Vice President Bill Wilcox

Secretary Ellen Boatner

<u>Treasurer</u> Amy Seiber

#### 2012 Board of Directors

Margaret Allard

Donna Bennett

Ellen Boatner

**David Bradshaw** 

Mike Bradshaw

Rick Lusk

**Bobbie Martin** 

**Dave Miller** 

Amy Seiber

**Betty Stokes** 

Tara Voit

Mick Wiest

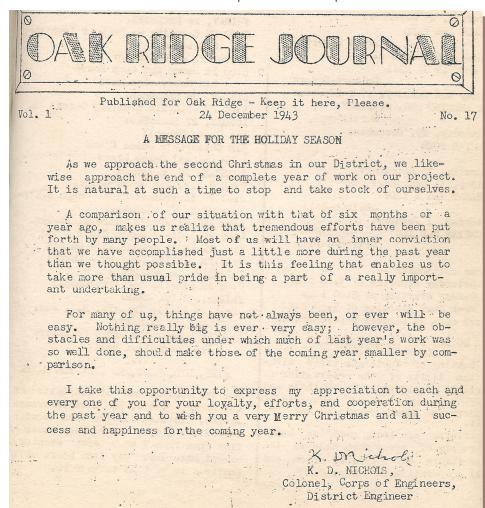
Bill Wilcox

We're on the Web www.OakRidgeHeritage.com



### The First Oak Ridge Holiday Message

(Notice the: "Keep it here please.")



#### Future ORHPA Programs ...

Date	ORHPA Program	Speaker	Meeting Location			
Jan 10, 2013	Memories of the SED	Bill Tewes	Mid Town Com. Center			
Feb 14, 2013	Meeting Cancelled—Happy Valentine's Day!					
Mar 19, 2013*	The Girls of the Atomic City: The Untold Story of the Women Who Helped Win World War II	AuthorDenise Kiernan	American Mu- seum of Science and Energy			

<sup>\*</sup>Note that the March meeting will be held on a Tuesday—at AMSE. Please send suggestions to  $\underline{Programs@OakRidgeHeritage.com}$ , Donna Bennett, Chair, Programs Committee.



### Preserve History; Develop Educational and Cultural Resources to Benefit Present and Future Generations --- ORHPA Mission Statement

December, 2012

#### New ORHPA Website

In today's competitive and cycle-time starved world, a well designed and up to date website is the primary communication, marketing and identity tool for many successful small organizations.

With that goal in mind, the ORHPA has secured two domain names and a website hosting service for a new and revitalized web site. ORHPA now owns OakRidge-Heritage.com and OakRidgeHeritage.org..

The website will be hosted under the OakRidgeHeritage.com domain name and will be used to enhance and extend ORHPA's internal and external communications and marketing efforts. The new site will enhance ORHPA's brand and highlight ORHPA's preservation activities to a larger audience.

In addition to serving as a communication channel to, from and within the ORHPA, the planned website will include a calendar of events, featured preservation activities, and links to other area historical websites. To increase the exposure of ORHPA, the website will be promoted to various web search engines so that, worldwide, people looking for information on Oak Ridge can easily find information about ORHPA.

The ad hoc website committee comprised of Rick Lusk, Anne and Martin McBride and Betty and Lloyd Stokes will be developing the website and plan to launch it live shortly after the New Year. More details will be provided as the site nears completion. Look for the new website at OakRidgeHeritage.com.

#### Richard M. Lusk

Chair, ORHPA Website Committee



# Great ORHPA Gifts for the Holidays

Check out the full line of ORHPA heritage gifts. Stop by the Oak Ridge Welcome Center Gift Shop, the Jefferson Compounding Center, or contact Don or Emily Hunnicutt at (865) 483-6081 or e-mail them at:

Don@OakRidgeHeritage.com

#### Another Year without World War III ...

Thanks to the efforts of tens of thousands of east Tennessee Manhattan Project workers during World War II—as well as many others across the country—our civilization has completed another year without a global World War.

The year 2012 marks the 67th year that mankind has avoided a terrible World War III. That's an amazing achievement, considering that only two decades separated the First and Second World Wars.

World War I was supposed to be the "war-to-end-all-wars." It's death toll is estimated to have reached 16.5 million people, including almost 7 million civilians.

In the wake of that terrible war, many hoped that global warfare was a memory of the past.

Yet a short two-decades later, the world was again immersed in an even bloodier global war: World War II.

Yet following WWII, the superpowers managed to navigate through any number of tense international confrontations—without another world war.

The horror of Hiroshima and Nagasaki (with their 300,000 deaths) remains in the world consciousness today. Yet, the memory of WWII's staggering non-nuclear death toll—over a hundred times larger at 50 to 70 million deaths—has largely faded.

The legacy of the Manhattan Project pushes mankind back from the brink of another deadly World War year-after-year.

In a few years, mankind will celebrate a century without a deadly World War III—a truly significant milestone.

## Tour Guide (continued from page 1)

"What early Oak Ridge workers accomplished in so-short a period of time is simply incredible," said David Bradshaw, President of the Oak Ridge Heritage and Preservation Association. "The new guide is a welcome addition to our efforts to preserve this priceless heritage. I really recommend it to anyone interested in this amazing aspect of World War II."

"The Manhattan Project brought World War II to an end and fundamentally changed the course of world history," said Tennessee State Representative (and retired Air Force fighter pilot) John Ragan. "I hope people will visit Oak Ridge and learn about the remarkable things that happened there. It's a fascinating story."

The guide is available for \$4.00 at the Oak Ridge Welcome Center, the American Museum of Science and Energy, the Oak Ridge Children's Museum, Jefferson Compounding Center and online at <a href="https://www.TheSecretCityStore.com">www.TheSecretCityStore.com</a>.



December, 2012

#### Author's Corner - This Month Featuring D. Ray Smith



D. Ray Smith, local historian and former ORHPA Board Member, has been writing the *Historically Speaking* weekly column for *The Oak Ridger* since February 2006 and a Y-12 history column since July 2007. These weekly columns have become favorite reading for many who are interested in our history.

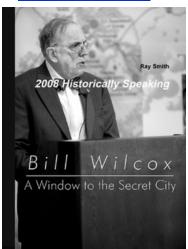
He has also published seven books that are available online at

www.TheSecretCityStore.com. A 2008 Historically Speaking

volume of Ray's annual books will soon be available as well.

Ray's Historically
Speaking stories are
also available online at
www.smithdray1.net/
historicallyspeaking/
archive.html.

Ray has produced historical documentary films such as A Nuclear Family and The Prophet of Oak Ridge. He and Keith McDaniel have published an audio



# This Month in Manhattan Project History

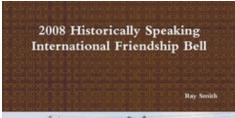
- <u>Dec 1938</u>—Otto Hahn and Fritz Strassman suspect that a socalled "radium" component created when neutrons impact uranium might actually be the much-lighter element, barium.
   Lise Meitner theorizes that uranium atoms are being "split" in a process she calls nuclear fission.
- <u>Dec 7, 1941</u>—A surprise attack on Pearl Harbor sinks much of the US Pacific Fleet and brings America into World War II.
- Dec 27, 1941—American rationing begins. The Office of Price Administration institutes rationing for rubber tires throughout America. By the end of April, 1943, rationing encompasses automobiles, sugar, typewriters, and gasoline. By the end of the war, the rationing program also includes coffee, shoes, stoves, meats, processed foods, and bicycles.

book, *The 1944 Troop Train Wreck*. Ray is also an avid photographer having produced six photo books of selected areas in East Tennessee.

Ray believes that for Heritage Tourism to reach its full potential in East Tennessee, Oak Ridge's rich history

must become a part of the fabric of the overall region's history. He is convinced the Oak Ridge heritage is unique and has tremendous potential to attract visitors to our city.

(Editor's Note: This column is intended to highlight authors who are relevant to ORHPA's mission and vision. Your comments and suggestions can help us select authors to showcase in the future.)





- <u>Dec 1941</u>—Japanese troops invade Philippines, British Borneo, Burma, and Guam.
- <u>Dec 1941</u>—Professor E.O. Lawrence at the University of California, Berkeley, demonstrates the feasibility of large-scale electromagnetic enrichment of uranium for the first time.
- <u>Dec 12, 1942</u>—Enrico Fermi achieves first self-sustaining nuclear chain reaction at Chicago Pile number 1.
- <u>Dec 14, 1942</u>—Famed Manhattan Project Photographer Ed
   Westcott is hired at the Clinton Engineer Works in Oak Ridge.
- <u>Dec 1943</u>—Oak Ridge's Graphite Reactor complex begins separating plutonium, urgently needed to develop the large-scale separation processes for the Hanford production reactors.
- Dec 16, 1944—Battle of the Bulge begins.
- Dec 17, 1944—509th Composite Bomb Group activated.
- Dec 1944—Hanford's D-Pile Reactor begins operations.

Reference: <u>55 Years that Changed History, A Manhattan Project Timeline</u>, <u>1894 to 1949</u>, McBride, 2010.



#### Preserve History; Develop Educational and Cultural Resources to Benefit **Present and Future Generations --- ORHPA Mission Statement**

December, 2012

#### Oak Ridge Heritage and Preservation Association

102 Robertsville Rd. Oak Ridge, TN 37830 President@OakRidgeHeritage.com

Sec	Secret City Wow-Facts							
Initial City Cost	The Secret City of Oak Ridge cost \$96,000,000.							
Rail- road	35-miles of railroad with 5 locomotives and 105 men were required to keep 3,000 car-loads of material rolling into the site each month.							
All Busi- nesses Im- ported	The Army imported nearly 200 small businesses into the Secret City. These included department stores, drug stores, shoe shops, barber shops, grocery stores, and a bank.							
Church Bells	Almost all pre-war churches were bulldozed to make way for Manhat- tan Project activities. Many church bells were relocated to army fire- houses.							
Recrea- tion Asso- ciation	Formed in 1943 (230 employees) to provide social, welfare, and recreation activities							
Amaz- ing City- Run Laundry	2,500 dry-cleaning cus- tomers and 9,000 laun- dry customers were served each week, in addition to 100,000 pounds of flatwork (sheets, linens, etc).							
Mas- sive Kitch- ens	17 army cafeterias and other establishments prepared 1.25 million meals per month.							
Large School Popula- tion	In October 1945, enroll- ment peaked at 8,223 students.							

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#### Across

- 1. Previously owned
- 5. ORHS dance site
- or not to
- 10. Oak Ridge Heritage and Preservation Association
- 12. Location of a federal nuclear test range
- 14. Type of Secret City temporary housing
- 15. Foot covering
- 16. What a bow shoots
- 18. Whitening agent
- 21. To choose
- 25. Lawrencium's symbol
- 26. Bromine's symbol
- 29. Used to sharpen straight razors
- 31. A company conceived in 1919 for the development of wireless communication
- 32. Historic Secret City Hotel
- 36. Iron's symbol
- **38.** Old
- 40. Billiard stick
- **41.** Assigned job
- 43. One who is brave and courageous
- 45. A type of tasty fish
- 46. Majestic shade tree **48.** Oak
- 50. Rickover's branch of the service
- 51. Tin's symbol
- 52. Cultural legacy or tradition passed on within a community from one generation to
- 54. Saving from destruction or deterioration old and historic buildings, sites, structures, and objects
- 59. Neptunium's symbol
- 61. To make a mistake
- 63. Sunrise
- 66. Group of people with similiar interests
- 69. Federal agency responsible for running Oak Ridge following WWII
- 71. Special Corps of Engineers Unit assigned to the Secret City
- 73. The contractor that ran the Secret City
- 75. Many Secret City homes lacked a shower but had one of these
- 77. Strontium's symbol
- 79. Pa's partner 81. K-25's county
- 83. How many pounds do I\_
- 86. The Lion constellation
- 87. The miraculous WWII Gaseous Diffusion

- Plant and future Heritage Tourism destination
- 88. The early Secret City atomic pile and laboratory which served as the original pilot plant for the Hanford plutonium production facilities
- 89. The Secret City's electromagnetic uranium separation plant which employed 22,000 work-

#### Down

- 1. Unexcelled
- 2. The WWII bomber that dropped the first atomic bomb was named: the \_
- 3. Large native horned mammal
- 4. Respectful response to a lady 5. A Warbler's claim to fame!
- 6. A rule that is passed by congress and ap-
- proved by the President
- 7. Corn-\_\_\_ pipe!
- 8. Last or greatest in an indefinitely large series; to the \_\_\_ degree
- 9. The Secret City had one of the largest \_ systems in the country
- 10. Significantly overweight
- 11. Ma's partner
- 13. A physician's formal title
- 17. Either/\_\_\_; Neither/Nor
- 19. Light Amplification by Simulated Emission of Radiation
- 20. Small sucking insect on houseplants
- 22. Erbium's symbol
- 23. The state named after the native American word "Quinatucquet"
- 24. Wood source
- 27. Male deer
- 28. Country which just won a bronze medal in men's curling!
- 30. Key OR school parent-teacher support group
- 33. Europium's symbol
- 34. Western Native American Tribe
- 35. Einsteinium's symbol
- 37. Wire mesh to keep insects out of early OR homes
- 38. Rickover's rank in later years
- 39. Accomplish a task
- 42. Needlework created by interlacing yarn in a series of connected loops using straight eyeless needles
- 43. Religious-Based songs
- 44. Liquid precipitation
- 47. WWII fighter pilot with at least five

- **49.** Golly \_ 53. Railroad
- 55. A depression in the Secret City's muddy streets
- 56. Chimney residue 57. Registered Nurse
- 58. President Eisenhower
- 60. Frequent academic degree of OR residents
- 62. Bismuth's symbol
- 64. Argon's symbol
- 65. Oldest OR radio station
- 67. International distress call
- 68. Ready, \_ \_, fire!
- 69. Honest
- 70. Code name of secret city opera-
- tions during the Manhattan Project
- 72. Which came first---chicken or the
  - 74. Hutment bed
- 76. Berkelium's symbol
- 78. Prescription
- 80. Navy affirmative
- 82. Sodium's symbol 84. Photo badge
- 85. Cheery hello!

#### The Secret City Journal

A publication of the Oak Ridge Heritage and Preservation Association, Oak Ridge, Tennessee

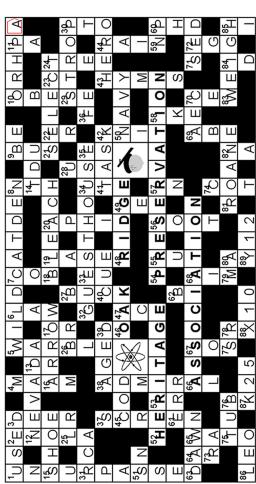
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Dave Miller, Associate Editor Dave@OakRidgeHeritage.com



P. O. BOX 5825 OAK RIDGE, TN 37831

#### Telling the Oak Ridge Story - Preserving Oak Ridge History



Puzzle solution for Dec 2012

### Join Us Now!



Please circle an annual membership level. ORHPA is recognized by the IRS as a 501(c)(3) organization. Your support is most welcome and tax deductable as per IRS guidelines.

#### I would like to become a member of ORHPA!

\$15 Student	Name
\$20 Individual	Address
\$30 Family	City
\$75 + Patron	State, Zip
\$250 + Sponsor	Phone
\$500 + Benefactor	Email
	Please mail completed form with check to:
\$1,000 + Major Benefactor	ORHPA P. O. BOX 5825 OAK RIDGE, TN 37831

Thank you for becoming a member of ORHPA!

Monthly meetings, open to the public, are held on the second Thursday evening of each month in the Midtown Community Center at 102 Robertsville Road.