

**BRIEF OVERVIEW**

**Career of Brigadier General  
Herbert D. Vogel, D.Eng., P.E., NAE**

**J. David Rogers, Ph.D., P.E., P.G.**

Karl F. Hasselmann Chair in Geological Engineering  
Missouri University of Science & Technology  
for the

**History & Heritage Committee Meeting**

**American Society of Civil Engineers**

**May 20, 2012**

**2012**

**WORLD ENVIRONMENTAL & WATER RESOURCES CONGRESS**

**ALBUQUERQUE, NEW MEXICO**

**MAY 20-24, 2012**

**Crossing Boundaries**

# "Vog" wins appointment to West Point in 1920



Plebe photo August 1920

- **Herbert D. Vogel** grew up in Chelsea, Michigan, where his father was a pharmacist
- He attended the University of Michigan for two years as an engineering student, briefly serving in the ROTC unit in 1918-19
- He enrolled as a Plebe at West Point in August 1920, majoring in civil and military engineering.
- His undergraduate nick-name was "Hash," short for "Hashimoto," or "Amos," because he was so quiet and studious.



## Department of Civil and Military Engineering

### PROFESSOR

Lieutenant Colonel Wm. A. Mitchell, Corps of Engineers..... '02—No. 1

### ASSISTANT PROFESSOR

Major Thomas M. Robins, Corps of Engineers..... '04—No. 2

### INSTRUCTORS

Major Joseph C. Mehaffey, Corps of Engineers, '11—No. 3  
 Major Frederick W. Herman, Corps of Engineers, '14—No. 14  
 Major John S. Bragdon, Corps of Engineers, '15—No. 5  
 Major Lehman W. Miller, Corps of Engineers, '15—No. 9  
 Major John F. Conklin, Corps of Engineers, '15—No. 13  
 Captain Holland L. Robb, Corps of Engineers, '16—No. 24

Captain Stanley L. Scott, Corps of Engineers, '16—No. 31  
 First Lieutenant Keryn ap Rice, Corps of Engineers, '18—No. 19  
 First Lieutenant Henry M. Underwood, Corps of Engineers, '18—No. 21  
 First Lieutenant Allison Miller, Corps of Engineers, '18—No. 34  
 First Lieutenant Robert E. York, Corps of Engineers, '18—No. 48  
 First Lieutenant Orville E. Walsh, Corps of Engineers, '18—No. 60



# Department of Civil & Military Engineering

- In those days West Point granted diplomas, not accredited degrees in engineering
- This practice transitioned to degrees in the 1930s, when states began enacting legislation for engineering registration
- **BGEN William A. "P" Mitchell (1878-1941)** directed the CE department in the 1920s and 30s. He served as an assistant professor in 1907-11 and as professor, from 1922-38.



Rifle Marksman; Pistol Sharpshooter; Corp. (3);  
Sgt. (2); Lieut. (1); Stars (2).

## HERBERT DAVIS VOGEL

"Hash"—"Amos"

*Second Congressional District*

CHELSEA

*Michigan*



AST is East and West is West, but Michigan isn't either. However, Togo came to us with the fatalism so characteristic of Oriental peoples and now, after three years, he is not quite certain whether he is here or not. His careering has not been ordinary, for he resolved to follow in the footsteps of his well-known pred, which he has done so successfully that the exploits of that worthy gent have been completely obliterated by the brilliancy of his own. The Jap's one outstanding characteristic is his love for dumb animals (himself and horses). With the thoroughness of his race he has given his best to the study of hypology and carried his researches to places not reached by the ordinary student.

In spite of his "tête de bois" he wears the gold stars of distinction and is never too busy to give assistance to a floundering goat.

- Vogel graduated in the Class of 1924 with a major in civil engineering and received a commission in the Corps of Engineers. Thereafter he was always known as "Vog"
- Only 10% of any graduating class received engineer appointments, and all of these came from the top 20% of the class. This choice provided more options for alternative employment outside of the Army.

# Engineer Training



- While stationed at the Engineering School at Fort Humphreys in Virginia, he met and married Loreine Elliot of Washington, DC, in December 1925
- He then served one year with the 13<sup>th</sup> Engineer Regiment
- In 1926-27 Vog was detached to the University of California to pursue his master's in civil engineering



# The battle over a national hydraulics laboratory

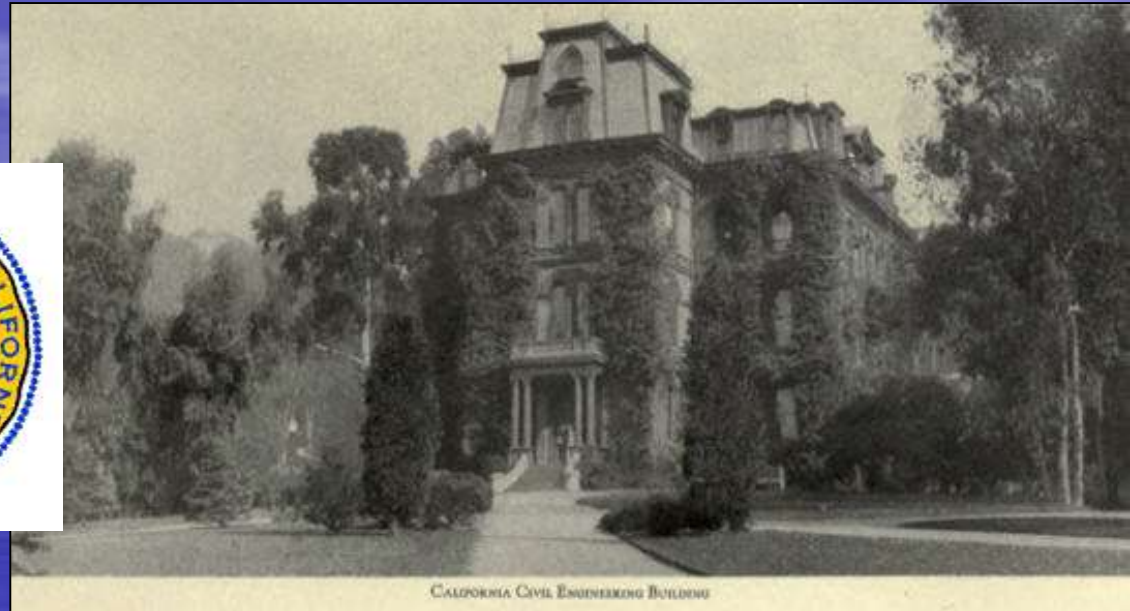


- In 1922 famed civil engineer **John R. Freeman** began advocating Congress for a national hydraulics laboratory, after viewing flood devastation in the Mississippi Delta.
- In 1926 Freeman established a Fund for promising hydraulic engineers to study abroad, administered by ASCE, ASME, and the Boston Society of Civil Engineers. The first **Freeman Fellows** went to Europe to study hydraulics in 1927.
- The Corps Chief Engineer, **MGEN Edwin Jadwin**, opposed the idea of a national laboratory operated by the National Bureau of Standards, feeling that it should be under the Corps of Engineers (because they had valuable field expertise in river mechanics)



- The disastrous **Flood of 1927** along the Mississippi River changed everything
- The Corps of Engineers was charged with solving the flood control woes of the Mississippi River, set forth in their **Jadwin Plan**, which was incorporated into the sweeping **Flood Control Act of 1928**
- Part of the act called for the establishment of a river hydraulics laboratory along the lower Mississippi River that would be under the Corps of Engineers control.

## Graduate work at Cal Berkeley 1927-28



- Vogel was one of six Army Engineers working on master's degrees at the University of California (Berkeley) in 1927-28, under **Charles Derleth**. In the spring of 1928 Vogel noticed an announcement of fellowships for foreign study in Germany through the **Institute of International Education**. He had grown up speaking some German and had taken two years of advanced German at Michigan.
- He received an offer to study at the hydraulic laboratory at the **Berliner Technische Hochschule** in Charlottenburg, beginning his studies on Nov 1<sup>st</sup>.





**Vogel (second from right) with other American scholars in Germany in 1929. Freeman Scholar Clarence Bardsley is fourth from left.**



**Outdoor hydraulic model at Dresden, photographed by Vogel**

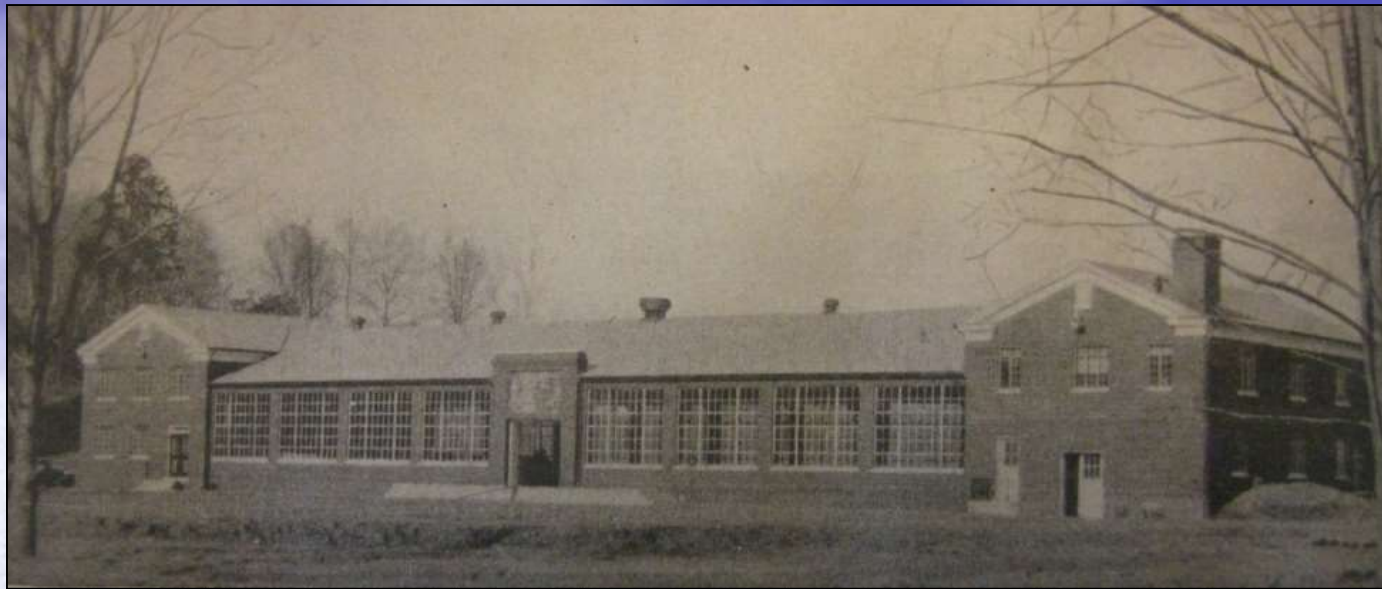
- **The Freeman Scholars were studying at the Prussian Institute for Hydraulic and Marine Engineering, located in Lock Island, next to the Berlin Technical Hochschule. Vogel worked with **Prof. George Henry de Thierry**, who had lectured at MIT in 1927.**
- **During the semester break in March-April 1929, he visited the hydraulic laboratories at Delft, Lyon, Zurich, Karlsruhe, Dresden, Vienna, Munich, Gratz, and Brunn. His per diem allotment from the Army was \$6/day.**
- **He received his Doctor of Engineering degree on August 1, 1929, and was posted to the Memphis District of the Army Corps of Engineers.**



Major General Lytle Brown, Chief of Engineers, 1929-1933

**Major General Lytle Brown** succeeded Edwin Jadwin as Chief of Engineers on October 1, 1929. He switched the site of the new hydraulics laboratory from Memphis to Vicksburg because the Corps' new Lower Mississippi Valley Division was to be based there.

- The new 147 acre laboratory was christened the **"Waterways Experiment Station,"** or **WES**, to placate President Hoover, who still favored a national hydraulics laboratory in Washington, DC.
- In May 1930 Hoover signed the act establishing a **National Hydraulics Laboratory** at the Bureau of Standards in Washington, DC, but it never received sufficient funding to establish itself as a prominent research facility.

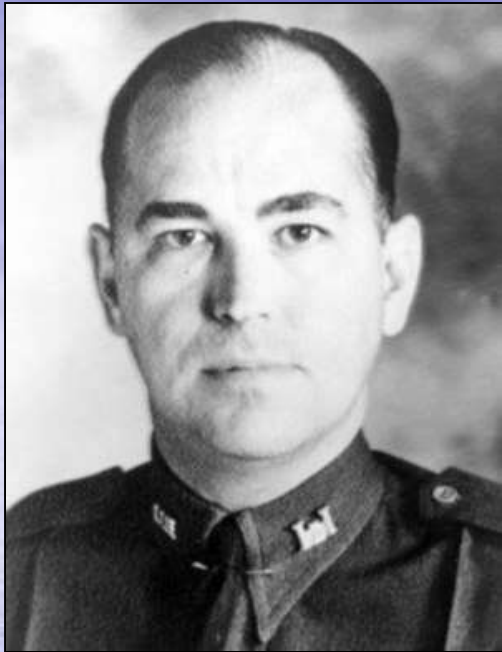


Brigadier General Thomas Jackson,  
MRC President, 1929-1932

- When Vogel was assigned the role of developing WES he was given a budget of only \$50K per annum.
- At the time **BGEN Thomas Jackson** served as President of the Mississippi River Commission (MRC), from 1929-32.
- Jackson funneled close to \$1 million to Vogel during the first year (1929-30), through the new Mississippi River & Tributaries Project
- This allowed Vogel to construct a real facility, purchasing holding tanks, flumes, weirs, and traps inside the main buildings.
- The administration building (shown here) alone cost \$122,000.



- **Aerial oblique view of the new Administration Building at WES and the earth dam impounding a 40 acre lake with sufficient storage to run all the hydraulic models. Note concrete apron for spillway at extreme left.**



**First Lieutenant Herbert  
D. Vogel, WES Director  
from 1929-34**



- **Vogel christened the reservoir “Lake Brown,” after Corps of Engineers Commanding General Lytle Brown.**
- **This shows the Vogel’s home overlooking the lake, from just above the dam’s right abutment.**



- **The silty loess soils in Vicksburg were perfectly suited to outdoor models with vertical exaggeration, as shown here. Note vertical cuts in the loess for the reservoir spillway at extreme right background. The new Administration Building is at left.**



- **During 1930-31 Vogel was able to employ former Freeman Scholar Professor Clarence Bardsley of the Missouri School of Mines (shown here with Vogel) to assist him in developing the first hydraulic models at WES.**



Vogel (left) and Prof. Clarence Bardsley (right), of the Missouri School of Mines

Vogel employed the principles of **similitude** that had been pioneered by hydraulic modelers in Europe to examine various means to make the Mississippi River channel more hydraulically efficient





# Full scale overflow tests



**Full scale overflow tests on railroad levee embankments, showing results after 226 hours (lower left)**



Full-size railroad embankment



Observers at railroad embankment test, 1931; note WES building in background

# Railroad levee embankment overflow tests

- The rail ballast overflow test drew considerable attention because everyone could understand their significance
- They reinforced the idea of “armored” levee crests, but failed to examine toe undercutting impacts, which are often exacerbated by underseepage

# Geometric Versus Hydraulic Similitude

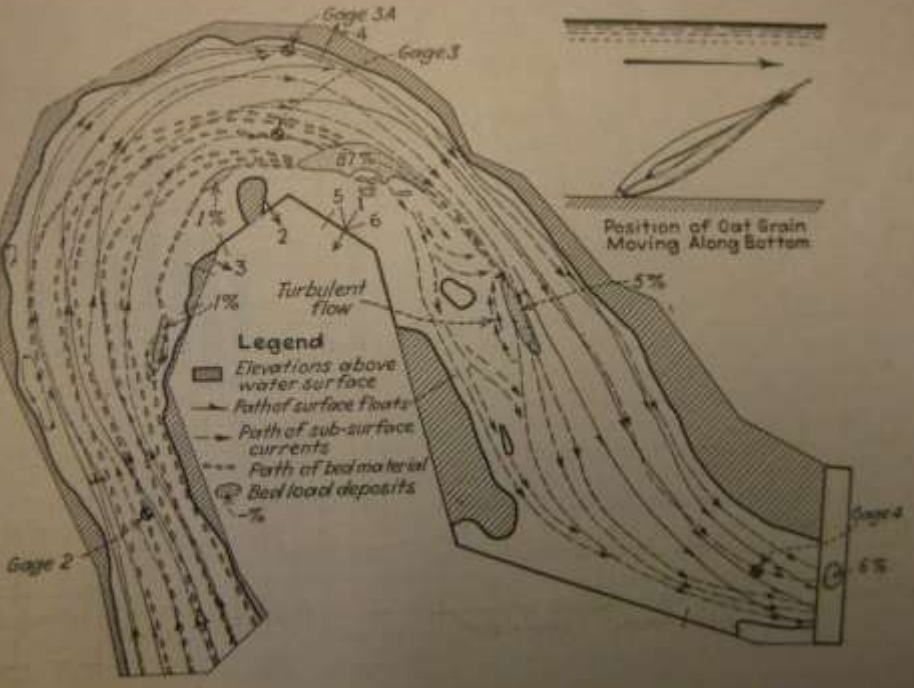
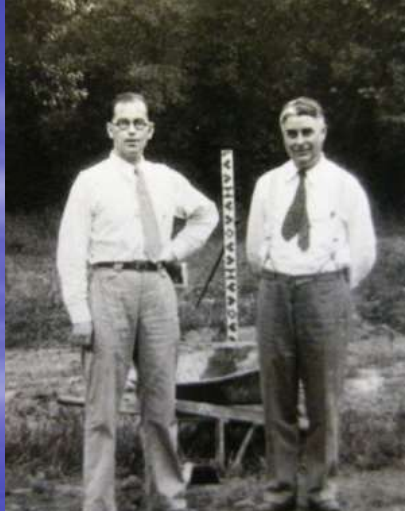
*Factors to Be Considered When Using Models to Study Flow in Open Channels*

By HERBERT D. VOGEL

DIRECTOR, U.S. WATERWAYS EXPERIMENT STATION, VICKSBURG, MISS.  
FIRST LIEUTENANT, CORPS OF ENGINEERS, U.S. ARMY

and JOHN PAUL DEAN

ASSISTANT TO DISTRICT ENGINEER, FIRST LIEUTENANT, CORPS OF ENGINEERS,  
U.S. ARMY, NEW ORLEANS, LA.



**One aspect the hydraulic models that was difficult to predict were long-term bed and bank adjustments, engendered over decades by dramatically different flow. Vogel mentioned these limitations, but no one seemed to take note of them until after the 1973 flood.**

# Organization and Operation of the Waterways Experiment Station

H. D. VOGEL

First Lieutenant, Corps of Engineers

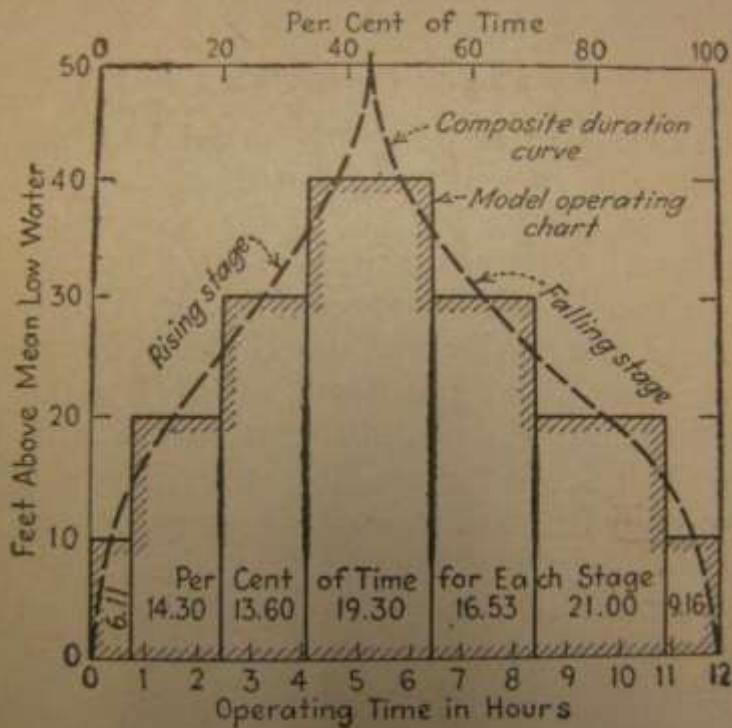


Fig. 7—Operating chart for a model based on hydrographs of river ranging over a five-year period.



The loess soils at Vicksburg were perfect for sculpting outdoor models. Vogel prepared a series of notable articles explaining the program of research at WES



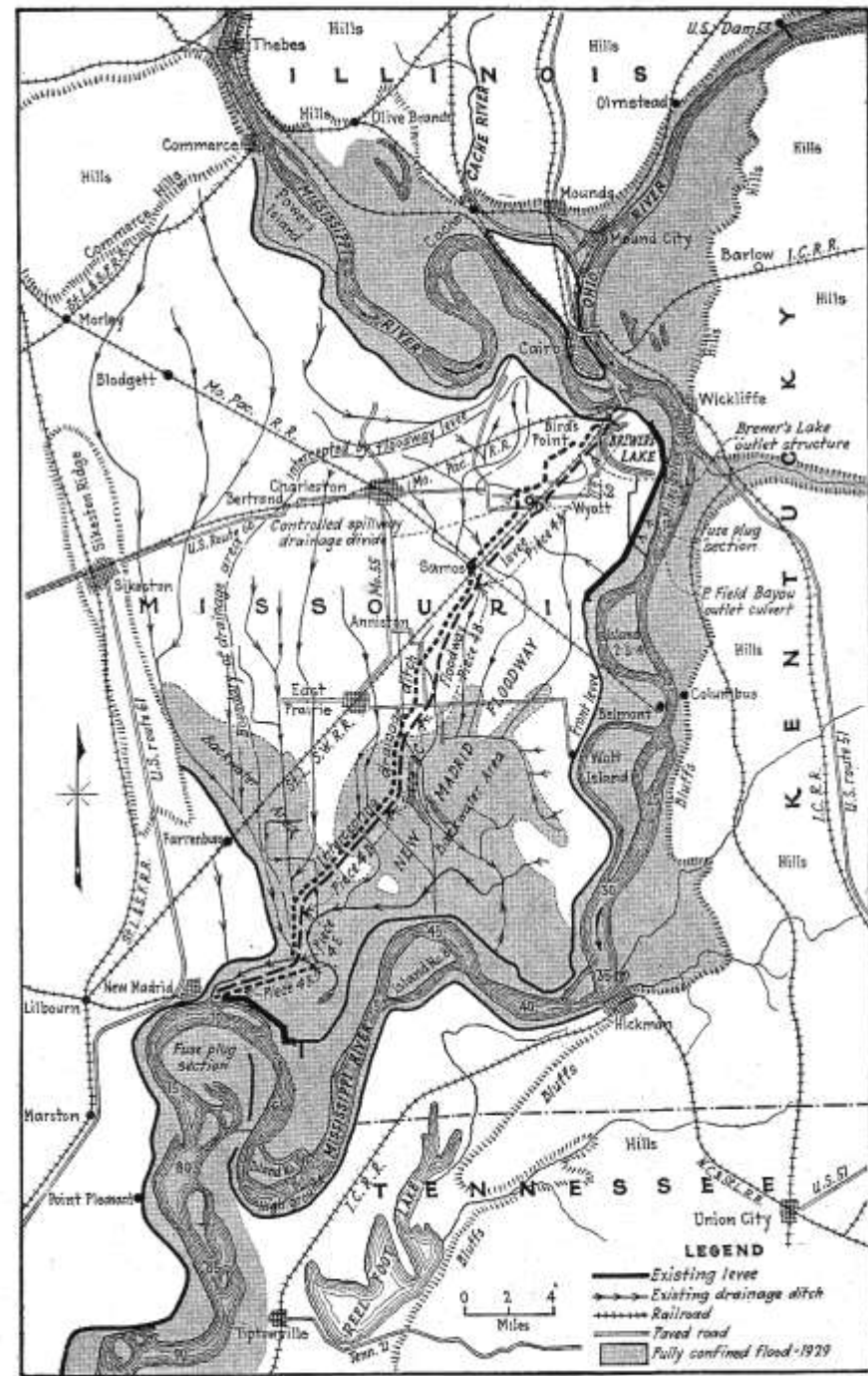
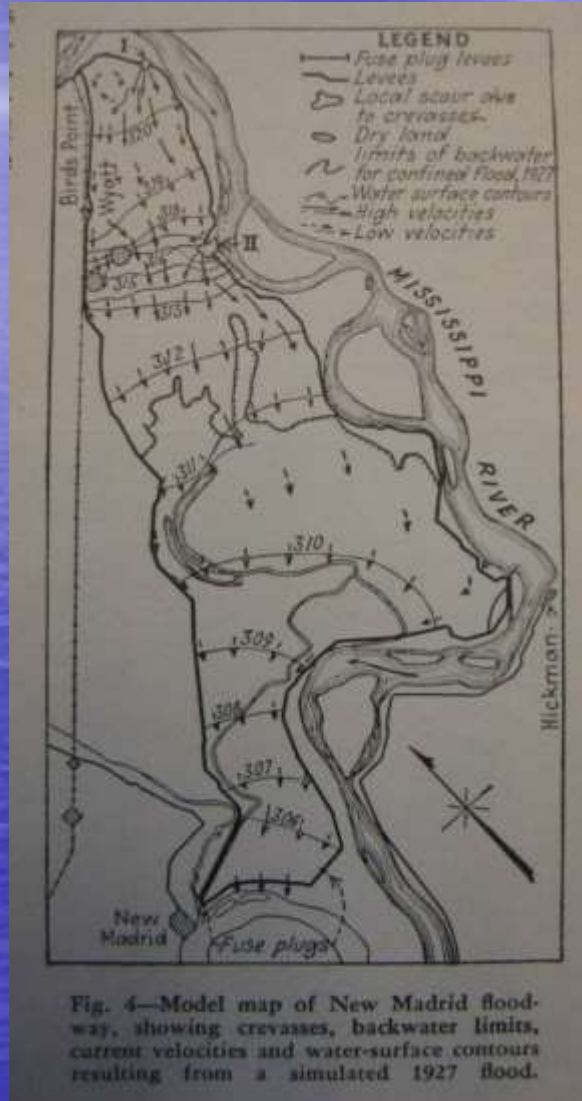
Model of Birds Point-New Madrid floodway under test



- The **Birds Point-New Madrid Floodway** was located in Missouri west of the confluence of the Mississippi and Ohio Rivers at Cairo, IL. It incorporates an area of about 206 square miles.
- In 1932 WES performed a model study to determine the effects of operating the floodway on the lands lying within it and to predict the draw-down on the Mississippi River with the floodway in use.
- With more than 100 miles of river to simulate, Vogel built an 80-foot-long outdoor concrete model of the river channel, the overbank between levees, backwater areas, and the floodway.
- Vog took special care to correctly place drainage ditches, levee borrow pits, and other details that would affect water levels, and raised miniature levees with soil taken from actual on-site levee borings. These tests indicated that the new levees were of sufficient height to contain any projected flood

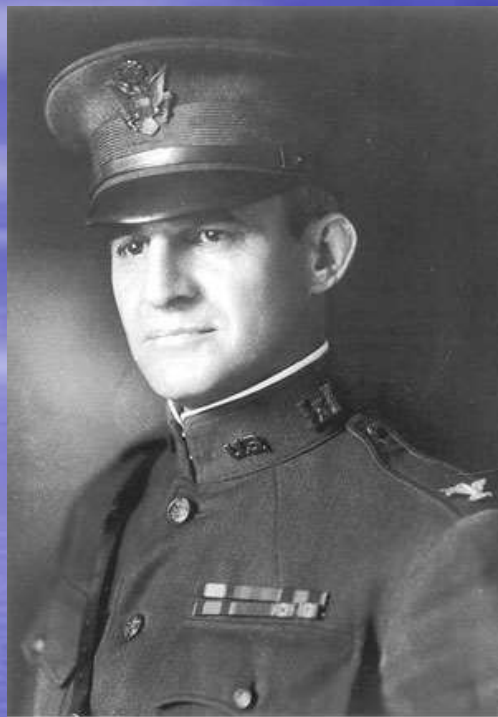
# Design Intent of the Bird's Point Floodway

The Corps of Engineers designed the floodway to save Cairo, IL, a key rail and highway junction. They also designed a drainage system to reclaim floodway lands for agriculture.





General Ferguson as President of the MRC



Colonel Harley B. Ferguson

**Brigadier General Harley Ferguson** (West Point '97) succeeded General Jackson as was President of the Mississippi River Commission from 1932-39, during the formative years of the Corps' **Mississippi River & Tributaries Project**

Ferguson was the Corps most outspoken advocate of **channel cutoffs** to improve hydraulic efficiency. In November 1930 he released a report calling for a series of cutoffs between the White River and Old River, the first of 16 cutoffs, all of which were modeled at WES. Ferguson established WES an integral part of the MRC and the MR&T project.

# Major Elements of the MR&T

- 2,200 miles of **levees and floodwalls** (avg 30 ft high) below Cape Girardeau
- **Bypass floodways:** Bird's Pt-New Madrid (1931); Bonne Carre (1931); Morganza Diversion (1954); Old River Diversion (1960/1977)
- **Channel improvements;** incl. 16 cutoffs and two major chutes; and bank revetments. Initially lowered flood stages 16 ft at Ark City and 10 ft at Vicksburg
- **Major tributary improvements,** 4 dams in Yazoo Basin (Enid, Arkabutla, Sardis, Grenada) and Wappapello on the St Francis River



# NEW PLANS FOR THE MISSISSIPPI

## Contraction Works Stabilize Low-Water Channel

*Seventh of a Series of Eight Articles*

Shallow navigation depths between Cairo and Memphis are being increased by narrowing and stabilizing the low-water channel by means of spur dikes

# WES strove to improve channel efficiency

**Framed timber dike under construction**

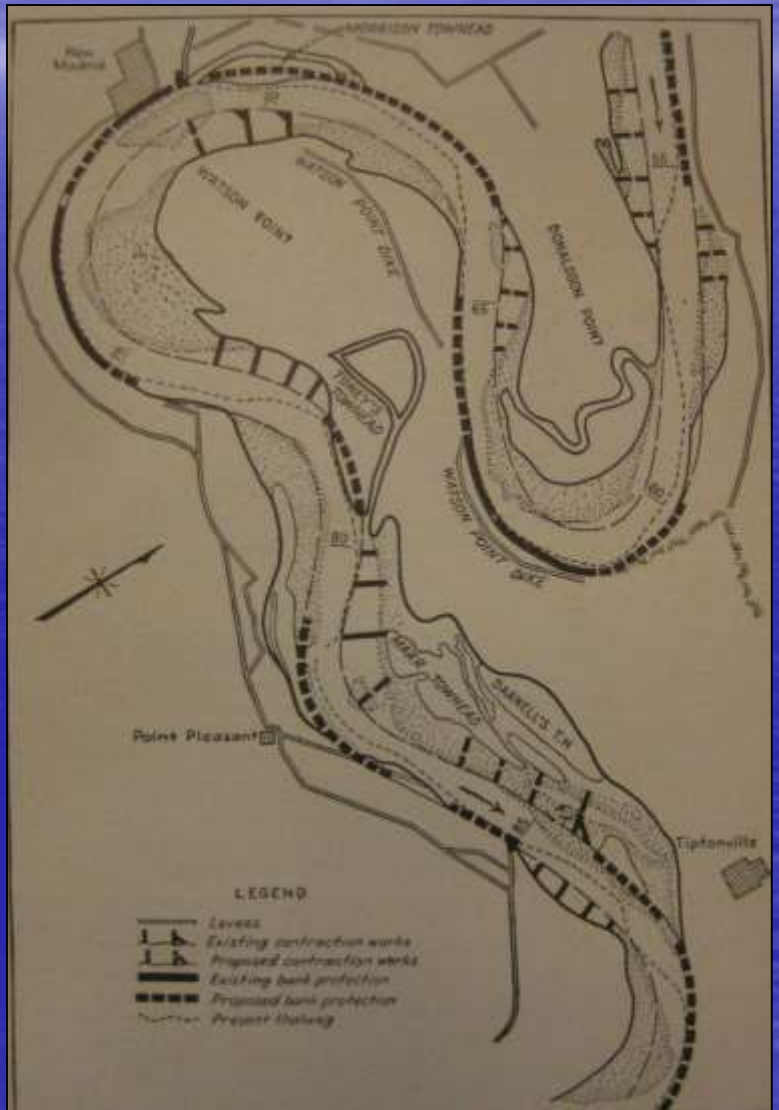
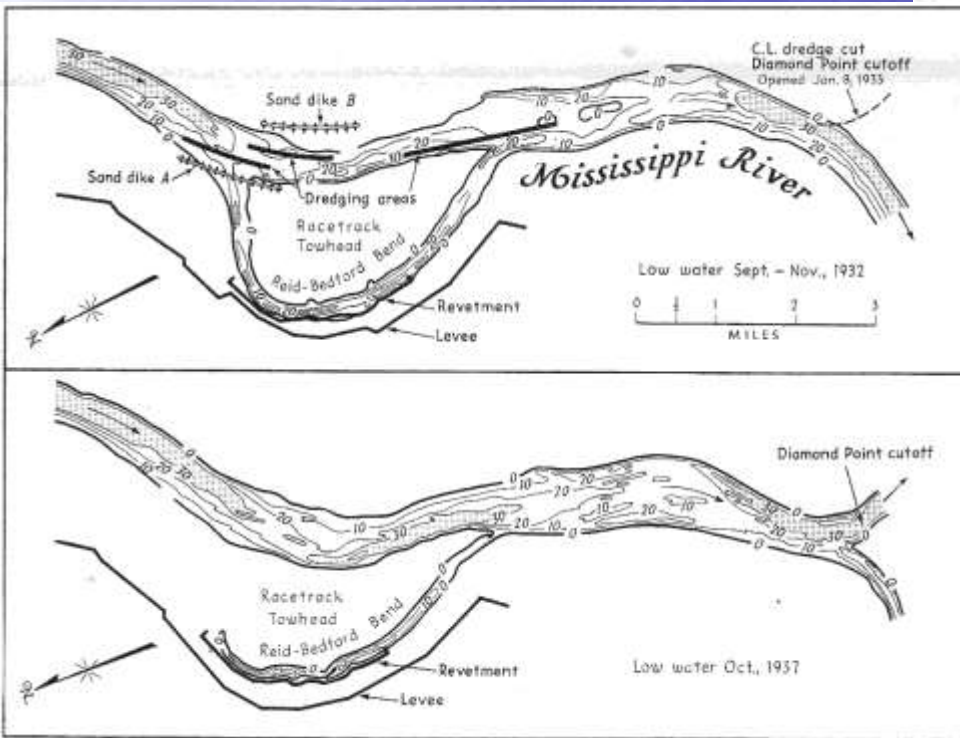




FIG. 1. INCREASING THE MISSISSIPPI'S CAPACITY: GILES CUTOFF IS BEING DREDGED AND VIDALIA POINT CUT BACK.

## Mississippi River Cutoffs Effective



## Cutoffs Lower Flood Crests

GEORGE R. CLEMENS  
Mississippi River Comptroller, Vicksburg, Miss.

*Fifteen cutoffs are rapidly redistributing the flow of the Mississippi River and have materially lowered flood crests above Red River Landing*

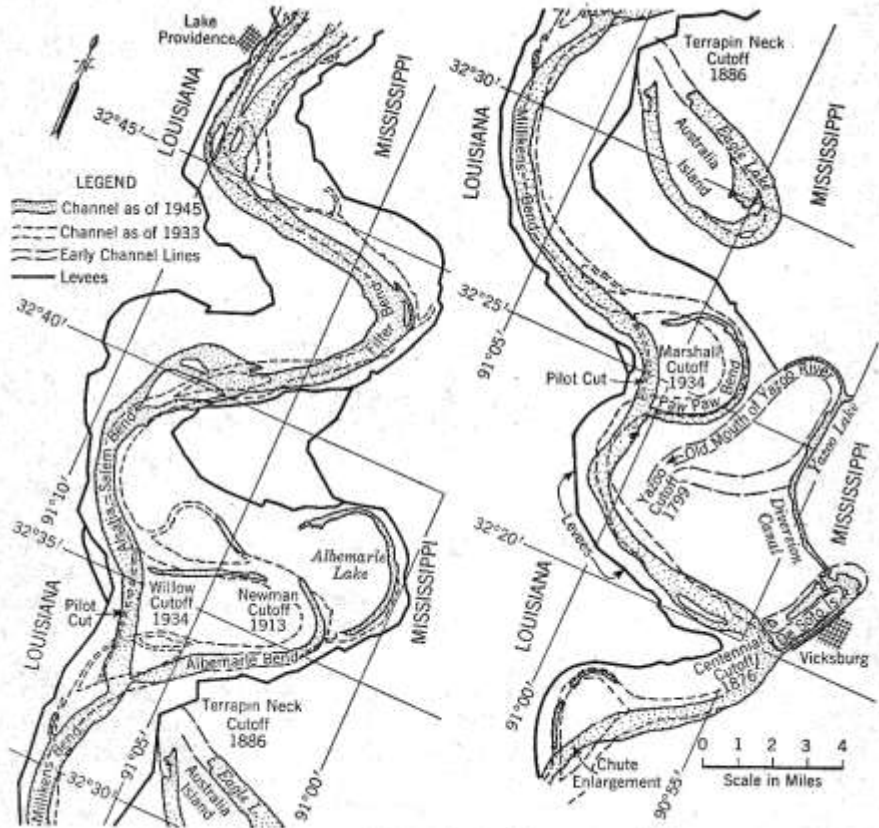


FIG. 2.—CUTOFFS IN THE 50-MILE SECTION UPSTREAM FROM VICKSBURG

**Goal: reduce flood height thru increased channel efficiency. 16 cutoffs were made along the lower Mississippi River to increase grades and channel efficiency.**

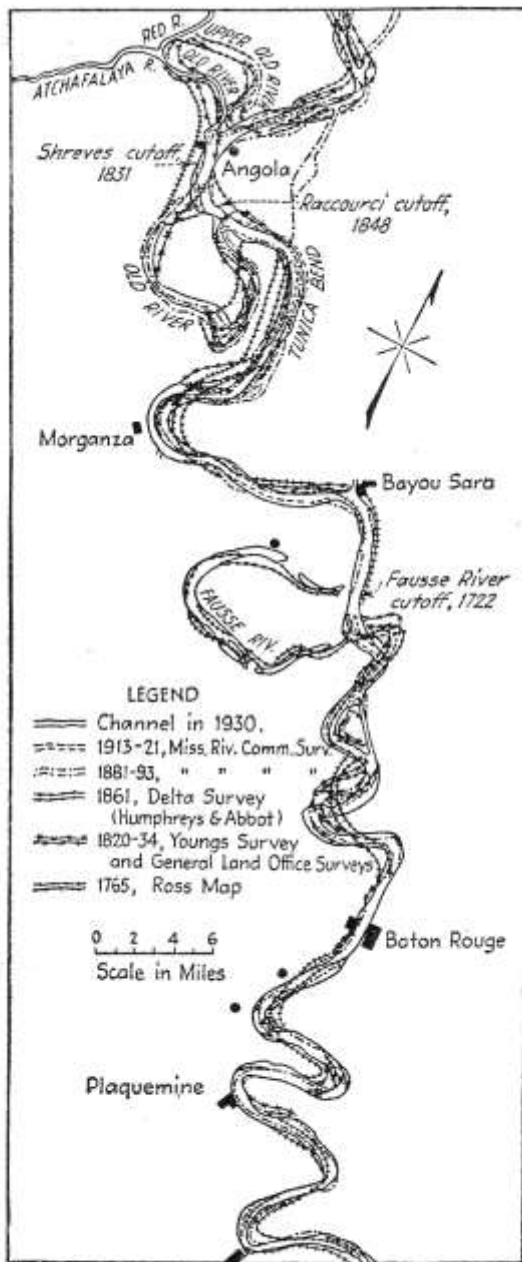


Fig. 5—Records of 165 years of channel changes below Baton Rouge reflect a high degree of stability. Compare with Fig. 4, which is typical above Red River.

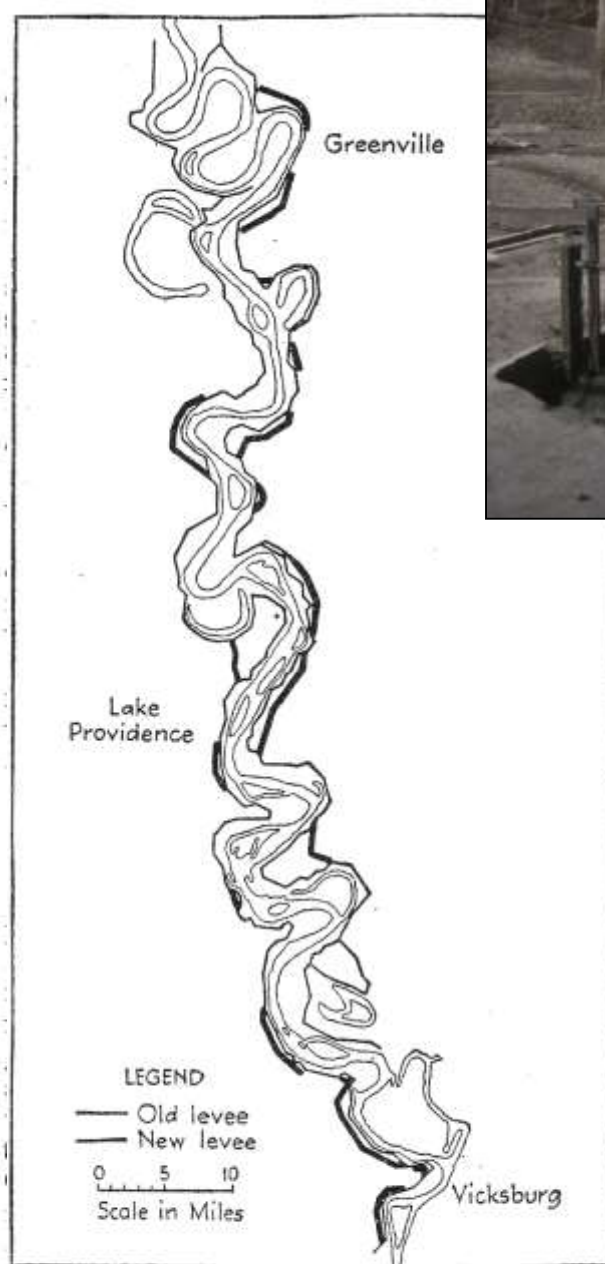


Fig. 6—Much rectification of the high-water channel has been accomplished by setting back the levee line at projecting points, as shown in this stretch between Greenville and Vicksburg.



# Effects of Mississippi River Cut-Offs

By HARLEY B. FERGUSON

MEMBER AMERICAN SOCIETY OF CIVIL ENGINEERS

BRIGADIER GENERAL, CORPS OF ENGINEERS; PRESIDENT, MISSISSIPPI RIVER COMMISSION, VICKSBURG, MISS.

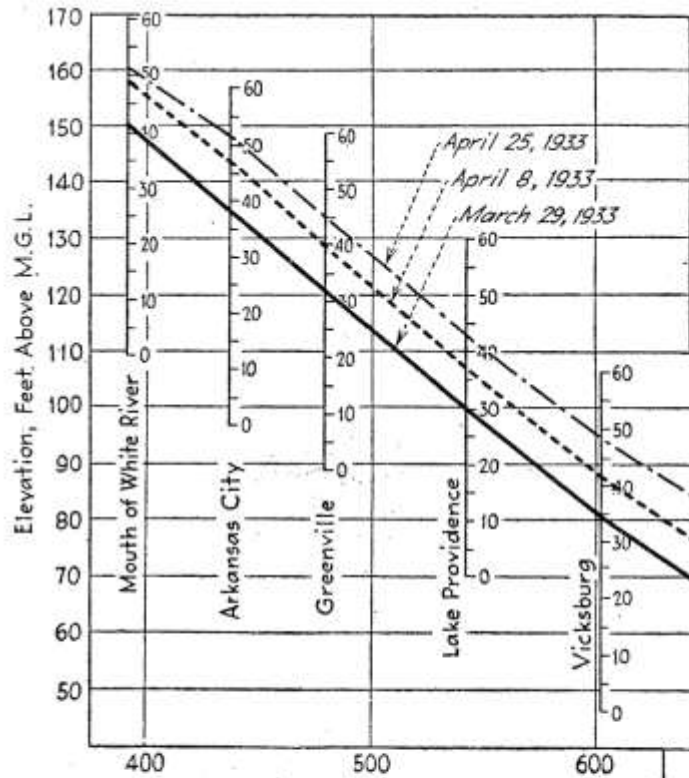


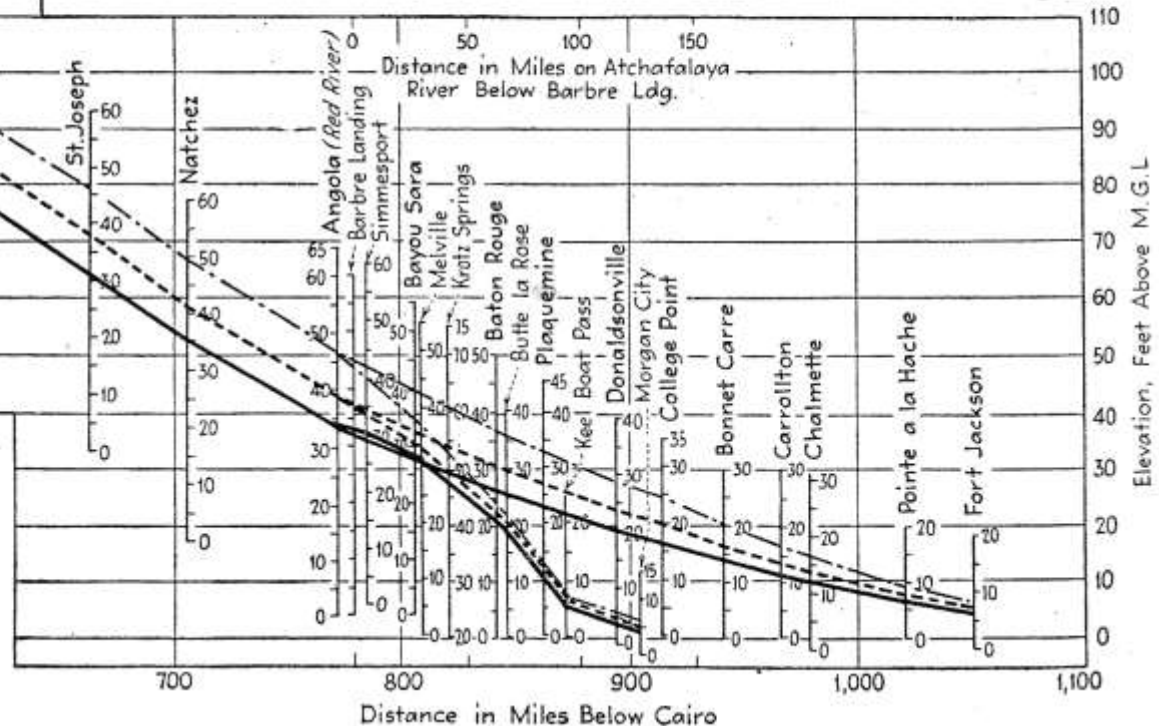
Fig. 2—River profile, on highly exaggerated vertical scale, shows an essential difference between the sections below and above Red River. Some of the present efforts of the Mississippi River Commission are directed toward smoothing out humps in the profile.

the controlling problem before the commission.

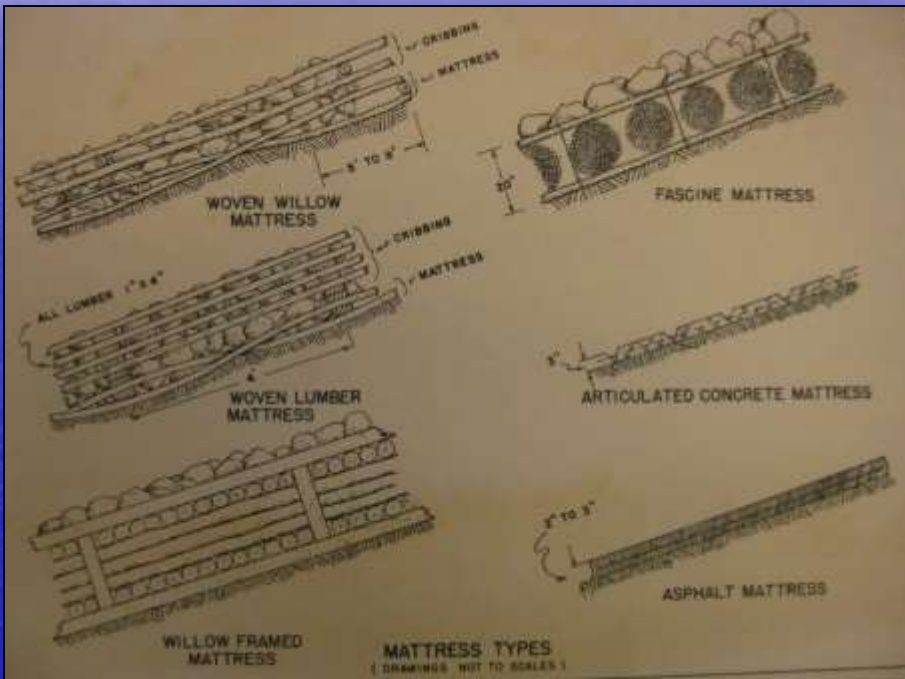
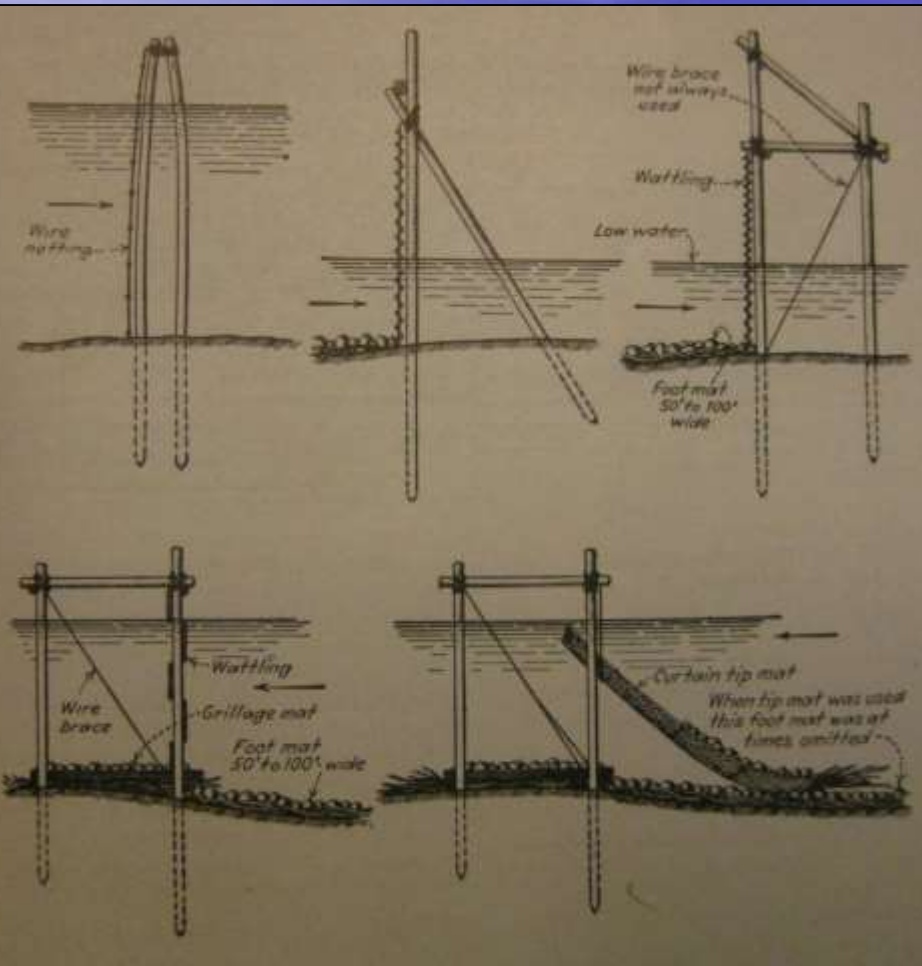
## Stabilization and capacity increase

Mention of the Boeuf floodway will call to mind the controversy that raged around this part of the project. The people who live in the strip 10 or 12 miles wide and 150 miles long, which

chief facts about the new work under way will be set forth in a series of articles. The present article gives a general account of the main problems at issue, the methods of attack and the views tentatively formulated. Subsequent articles will describe the cutoff operations, contraction works, new



# Developing design standards for brush dikes

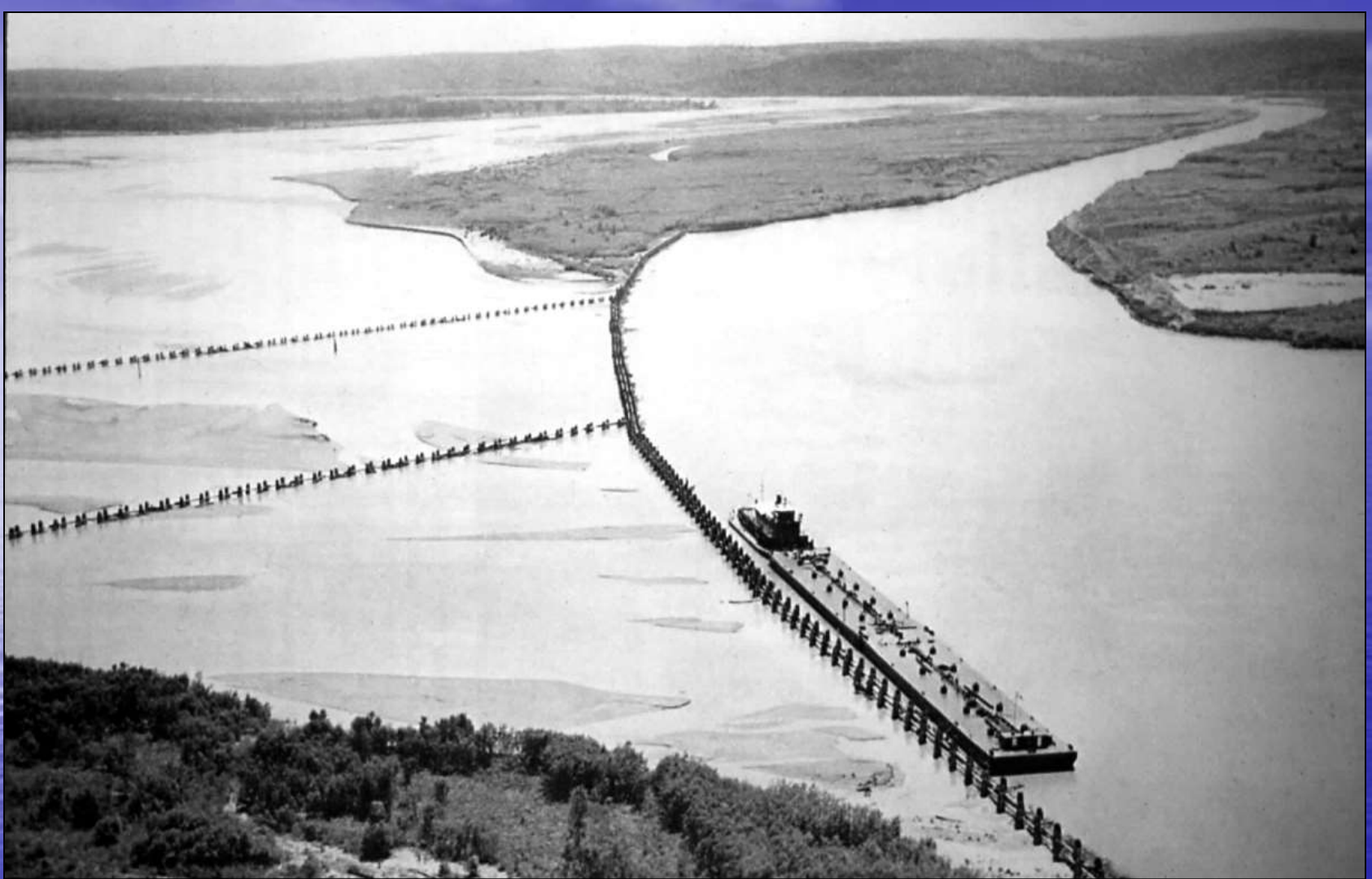


- WES also developed schemes for **timber dikes** and submerged **brush foot mats** and **curtain tip mats**

# Timber framed dikes

- The Corps also employed framed dikes to assist in construction of channel cutoffs
- Flotsam collected against these timber dikes during spring floods, forming reinforced brush dikes that were effective in trapping sediment



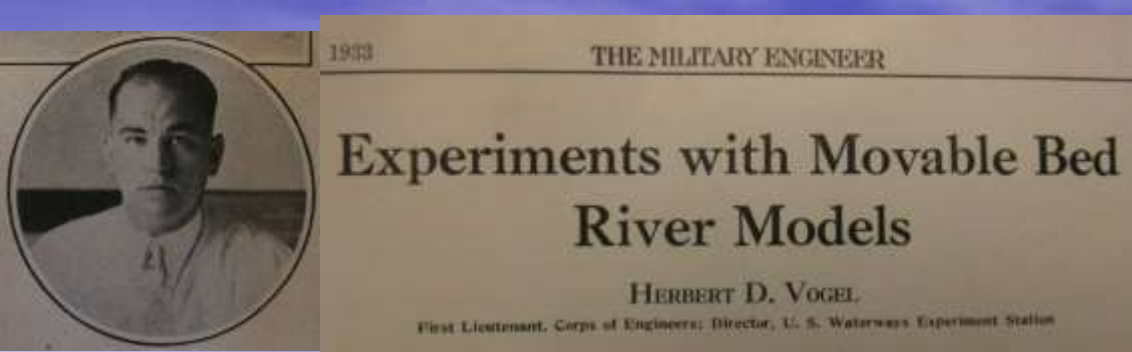


- **Framed dikes** were employed along the Mississippi River to confine flow and increase velocity along a **preferred navigation channel**. These dikes caught organic debris which aided in their becoming backfilled with sediment.



- **While working at Vicksburg, Vogel enrolled in summer studies at the University of Michigan, and completed his professional civil engineering degree in 1933.**





# Examining transient bed effects at constant flow values

Natural sand bed channel (lower left); dredged channel (upper right); and impact of structural dikes (lower right)





- **Between July 1-August 28, 1934 Vogel made a special return trip to Europe to tour their hydraulic laboratories. He found that WES had progressed far beyond anything in Europe**
- **He then reported to the Army's Command and General Staff School at Fort Leavenworth, one of the most junior officers to ever attend this two-year course.**
- **He was promoted to Captain in August 1935, nine years after graduating from West Point.**



- Left: From mid 1936 to 1938 Vogel served with the 3<sup>rd</sup> Engineer Regiment at **Schofield Barracks** in Hawaii.
- Right: He then served as an instructor at the **Army Engineer School** at **Fort Belvoir** (Washington, DC) from 1938-40.

# War hastens rapid promotion of career officers in 1941-42



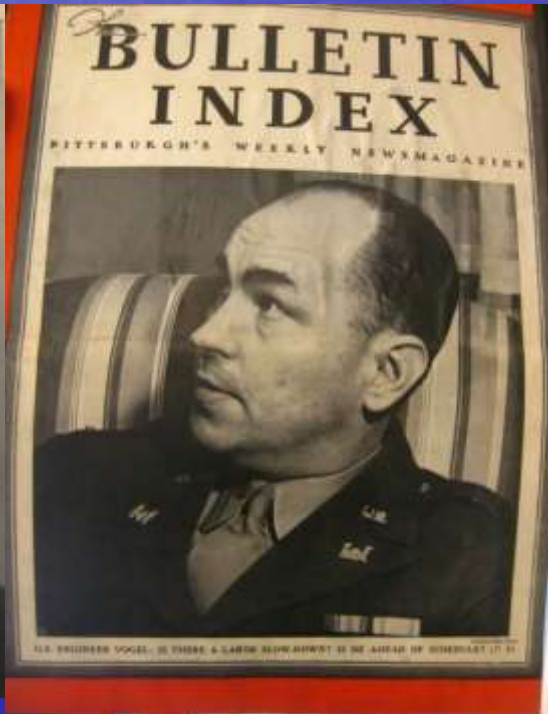
- In July 1940 he was posted to Pittsburgh as an assistant to the District Engineer, and was promoted to major in August 1941.
- He was promoted to Lt Colonel in Dec 1941, and to full Colonel and District Engineer in August 1942.

CHECK POSTS  
August 1942

# Colonel Herbert D. Vogel Promoted

MERITED PROMOTIONS for officers supervising war projects in the Pittsburgh Engineer District have recently been announced.

IN RECOGNITION of his accomplishments as District Engineer, for efficiently handling problems of enlarged scope and responsibility, Lt. Colonel Herbert D. Vogel has been promoted to full Colonel, with rank from August 4. Besides lock, dam, and flood control activities, Colonel Vogel directs the construction of ordnance plants, storage depots, airports, and war projects in the Pittsburgh Engineer District.



Col. Herbert D. Vogel, as district engineer, is in charge of engineers' work in the Pittsburgh-area, including eastern Ohio and Western Pennsylvania

- After his promotion to Colonel in August 1942, the press photos no longer show him wearing glasses, and he began smoking large cigars.



- **Vogel presided over dozens of Army-Navy Excellence in Wartime Production Awards in 1942-43**

# Duties of a Corps district engineer during wartime



MINUTE MAN FLAG AWARDED TO DISTRICT

In recognition of the regular purchase of War Savings Bonds by civilian employees, through the convenience of the Army Pay Reservation Plan, Colonel Herbert D. Vogel, District Engineer of the Pittsburgh District, has been authorized by the Secretary of War to display the coveted "Minute Man Flag."

On receipt of the Certificate of Authorization, bearing the signature of the Hon. Henry L. Stimson, presentation of the blue emblem with its white figure was made by Captain W. I. English, Post War Bond Officer.

In accepting the award in behalf of the employees of the Pittsburgh, Pa., Engineer District, Colonel Vogel stated: "My heartiest congratulations to each of you who have been responsible for the success of the War Savings Bond campaign in this District. Your initial response has been more than gratifying ... your continued support of the program is essential."

"A PASSION FOR UNDERSTANDING"

## The Hungry Club

"PITTSBURGH'S DOWN-TOWN MEETING"

MONDAY,  
JANUARY 4, 1943  
HOTEL HENRY, BALL ROOM

Where everyone, of every viewpoint, is welcome. Meeting, 12:30; Luncheon, 12:00. Physicist Committee: Joseph A. Beck, J. Steele Gow, Edward O. Tabor; Secretary, John G. Weaver; Treasurer, E. A. Becker; 228 Lacimer Avenue, Pittsburgh (HI-9437.) Weekly notices for season, \$2.00.

Col. HERBERT D. VOGEL

### THE FLOOD CONTROL SITUATION IN THE PITTSBURGH DISTRICT

The sudden flood emergency means that information on measures being taken for immediate needs will be vital to the public, as well as on the long-range program for flood control at the headwaters of streams. Colonel Vogel, district engineer of the United States War Department, is in position to give both types of information.

Colonel Vogel was graduated from West Point in 1921, and has done post-graduate study at the Army Engineers' School, Fort Belvoir, at the University of California, and in Germany. He has since served in the Army Engineer Corps, and from 1939 to '44 was in charge of the U. S. Waterways Experiment Station—for flood control—at Vicksburg, Miss. From 1936 to '38 he was with troops in Hawaii; until 1940 he was instructor in river and harbor engineering at Fort Belvoir, coming then to Pittsburgh and acquiring a comprehensive knowledge of the flood control projects which have been making progress in this area.

H. B. KIRKPATRICK, chairman of the Citizens' Flood Control Committee, organized in cooperation with the Chamber of Commerce, will also take part in the program, speaking on the background of civic organization out of which the government projects were evolved; and on the present and future responsibilities of citizens.



# Emergency Civil Works Projects

## Berlin Reservoir Is Triumph For Engineer, Colonel Vogel

Dedication of the \$6,600,000 Berlin reservoir will be a personal triumph for Col. Herbert D. Vogel, U. S. army, Pittsburgh district engineer, for he has long wanted a big job in the Youngstown district—and the reservoir was the U. S. army engineers' first big one in the area.

"It gave us our first real chance to get acquainted with the Youngstown district," said Colonel Vogel some time ago, "and we found we had many friends there."

But other important jobs in the eastern Ohio-Western Pennsylvania area came rapidly on the heels of the Berlin job for the Pittsburgh engineers' office.

Among these other jobs were construction of the huge army depot at Lordstown; the personnel center at Shenango, Pa., and the Keystone Ordnance Plant at Geneva, Pa., near Meadville.

### Graduate of West Point

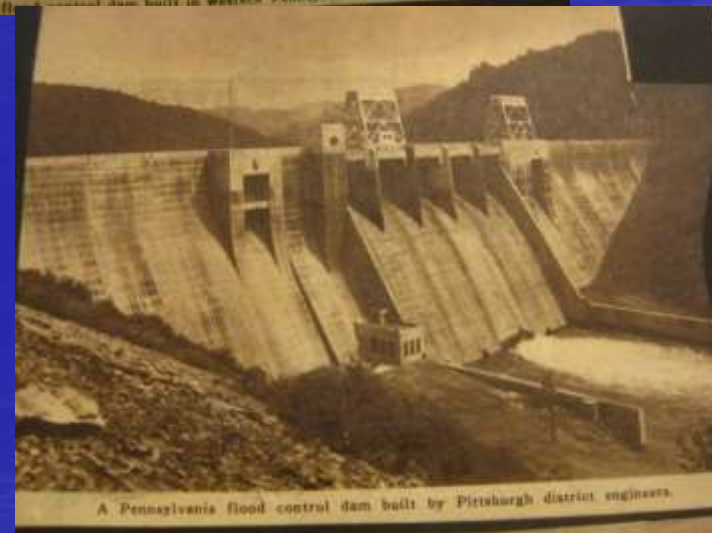
Colonel Vogel, a West Pointer, has had plenty of experience with the army engineering corps, and has a first hand knowledge, too, of what it will take to lick the Nazis.



Col. Herbert D. Vogel



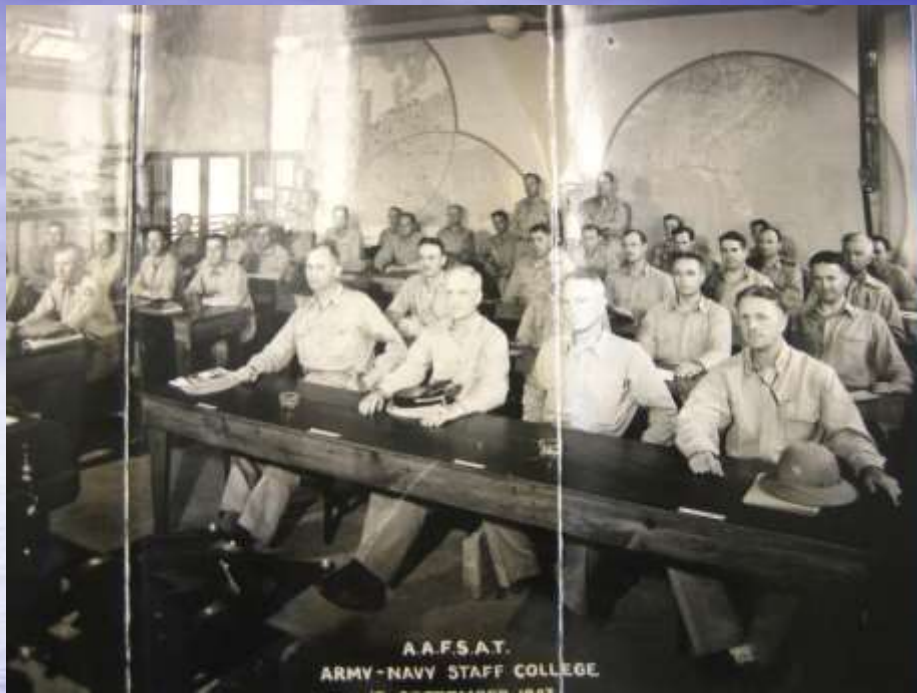
A view of a flood control dam built in western Pennsylvania by Army engineers.



A Pennsylvania flood control dam built by Pittsburgh district engineers.

- The Pittsburgh District witnessed an unprecedented level of wartime construction projects, many associated with critical wartime industries, such as munitions plants





- Between July-October 1943 Vogel was sent to the newly formed **Army and Navy Staff College** (combined with the Army Air Force School of Applied Tactics), in Washington, DC prior to his assignment to the Southwest Pacific combat area.

# Service in Southwest Pacific 1944-45



In October 1944 the **US Army Services of Supply** (USASOS) established Base M for joint logistical support of all ground operations in the Southwest Pacific Area, under Generals J. L. Frink and Douglas MacArthur.

- Colonel Vogel served as Chief of Staff of the Intermediate Section of USASOS, under MGEN C. L. Sturdevant.
- In March 1945 Vogel assumed command of Base M with 32,000 troops at Lingayen Gulf, supporting General Walter Krueger's 6<sup>th</sup> Army of 10 divisions and 250,000 soldiers, engaged in the northern Philippines. He was awarded the Distinguished Service Medal (DSM) for this assignment.



## **Recommended for promotion May 1945**

General Vogel is reunited with General Douglas MacArthur in New York in 1954, during one of MacArthur's periodic reunions of his Southwest Pacific staff.

- **Vog developed more streamlined methods of delivering supplies to soldiers in the field, by anticipating needs and caching critical supplies at various points, to allow rapid delivery.**
- **He was recommended for promotion to brigadier general by MacArthur in May 1945, but by this time the war in Europe had concluded and there was a surplus of general officers, so his promotion was not acted upon.**

# Post-war opportunities

- In the fall of 1945 Vogel was offered several positions, **Knappen Engineering (TAMS)** in New York, and Chair of Civil Engineering at the **University of Michigan**, but the Corps of Engineers would not release him until he had served 30 years because they were short of 'senior engineers'
- In November 1945 he was posted to Buffalo, New York as the Corps District Engineer, remaining there until June 1949
- In June 1947 Vogel's regular Army of the United States rank reverted to Lt Colonel, Corps of Engineers
- He was promoted to full Colonel in the Corps of Engineers in March 1949



- Colonel Vogel representing the United States at the *World Association for Waterborne Transport Infrastructure (P.I.A.N.C.)* conference in Brussels in 1948

RESOLUTION OF COMMENDATION TO COL. HERBERT D. VOGEL

Adopted by the Board of Directors  
Buffalo Chamber of Commerce  
June 20, 1949

The Board of Directors of the Buffalo Chamber of Commerce, while deeply regretting the departure of Col. Herbert D. Vogel, District Engineer of the Buffalo District for the past three years, extends congratulations to him upon a well-merited promotion to the post of District Engineer of the Panama Canal Zone.

Col. Vogel's period of service in Buffalo has been marked by unusually worthwhile achievements, such as the improvement of Buffalo Harbor and other Federal works in the Buffalo area. His cooperation with the Buffalo Chamber of Commerce is deeply appreciated by members of the Board of Directors and the entire membership of the Chamber. Col. Vogel's distinguished work has earned him a permanent place in the esteem of the Buffalo business community.

- Commendation from the Buffalo Chamber of Commerce in June 1949, when he was being detached.



Vogel publicizing March of Dimes campaign as Acting Governor of the Canal Zone, in February 1952

# Engineer of Maintenance and Lt Governor of the Canal Zone

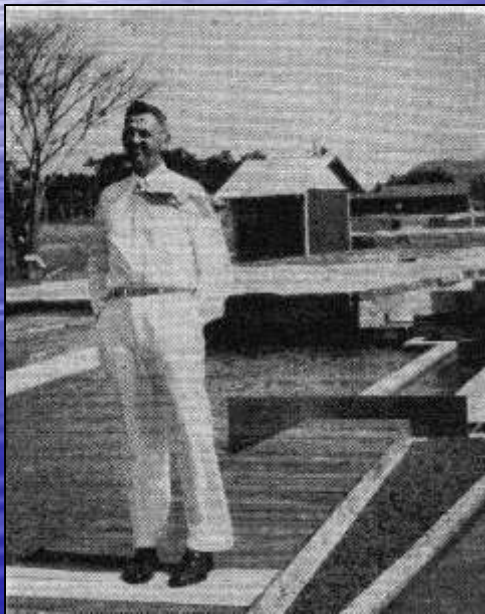
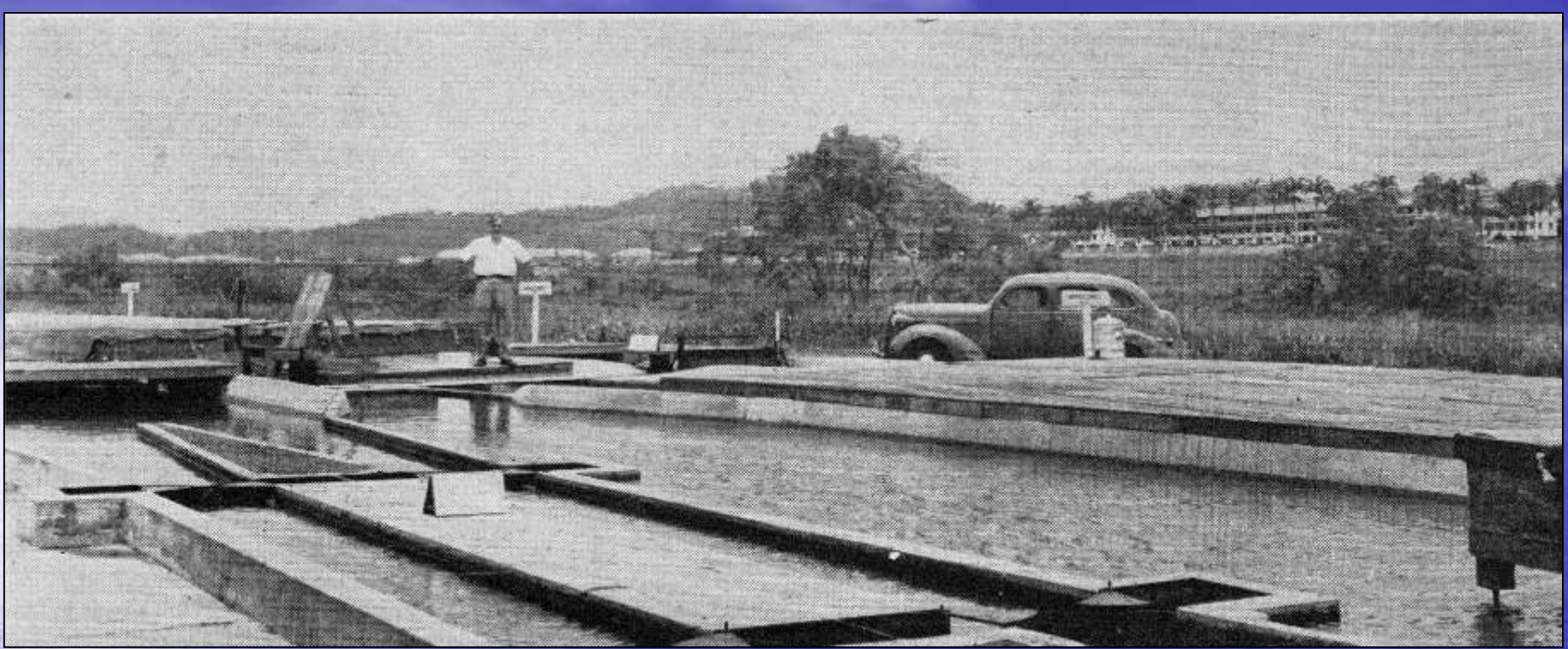
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3652



Loreine Vogel

- Colonel Vogel was transferred to the Panama Canal in July 1949 to assume duties as the Engineer of Maintenance and Lieutenant Governor. Lo and Vog enjoyed their tour in Panama, with their younger son Dick. Their older son, Herbert Jr., was a cadet at West Point.



- During the late 1940s the Corps of Engineers examined the various options for converting the Panama Canal to a sea level waterway, to increase capacity and safeguard it from interdiction by nuclear weapons during time of war.
- **Colonel James H. Stratton** (lower left) constructed a half-mile long hydraulic model of the Canal Zone (shown above in 1946) to examine the various facets of tidal influx and flood control on a sea level canal. Stratton retired in 1949 and joined Knappen Engineering, which became TAMS in 1954.



# Speculation Rife Over New C.Z. Governor As Senate Delays Action

## BULLETIN!

### Vogel Transferred

Colonel Herbert D. Vogel, first lieutenant governor of the Canal organization, received orders Friday appointing him Division Engineer for the Southwest Division of the Army Engineers, Headquarters for the Division are in Dallas, Texas.

Colonel Vogel and his family expect to leave the Isthmus May 23 on the S. S. Panama.

Seybold at its meeting Thursday. It is said that the committee which must pass on the nomination before it goes to the full Senate for approval may vote...

administration on Gen. Seybold's nomination will vote to confirm. Reason that administrator will vote by the white American vote. (Continued on Page 4)

All The NEWS OF Real VALUE



**The Panama Tribune**  
THE LEADING WEEKLY PAPER IN ALL CENTRAL AMERICA

No. 1213 Sunday, April 27th, 1952 24th Year

Speculation...

# The Passing R...

by George

Every sector of the Isthmian community, especially that viewed as the Canal Zone, appears to be in sympathy with Lt. Governor Herbert D. Vogel who has been by-passed for governorship of the Panama Canal Zone. The appointment last week of Brigadier Gen. John States Seybold by President Harry S. Truman to succeed incumbent Governor Francis K. Newcomer had a terrifically surprising impact on high and low alike.

Breaking the continuity of promotions over the 40-year the U. S. President has cast a spell of insecurity over every...

injection tige can America. very detra gamble for the long-s new appoi are unfam If the p ers can f the Canal much mor those without a or a hom dler.

We do which le believe t hold n...

# AN EDITORIAL

President Harry S. Truman broke another precedent when on April 16 he nominated Gen. John S. Seybold to replace Brigadier Gen. Francis K. Newcomer as Governor of the Panama Canal Zone when the latter's four-year term expires next month. Since the days of Governor George W. Goethals, the officer designated as Engineer of Maintenance has always succeeded to the office of Governor, after having acquired several years of experience in Canal operations as second in command. It is reasonable to affirm that this tradition has been observed through two World Wars without misfortune to the Canal or prejudice to the United States interests on the Zone.

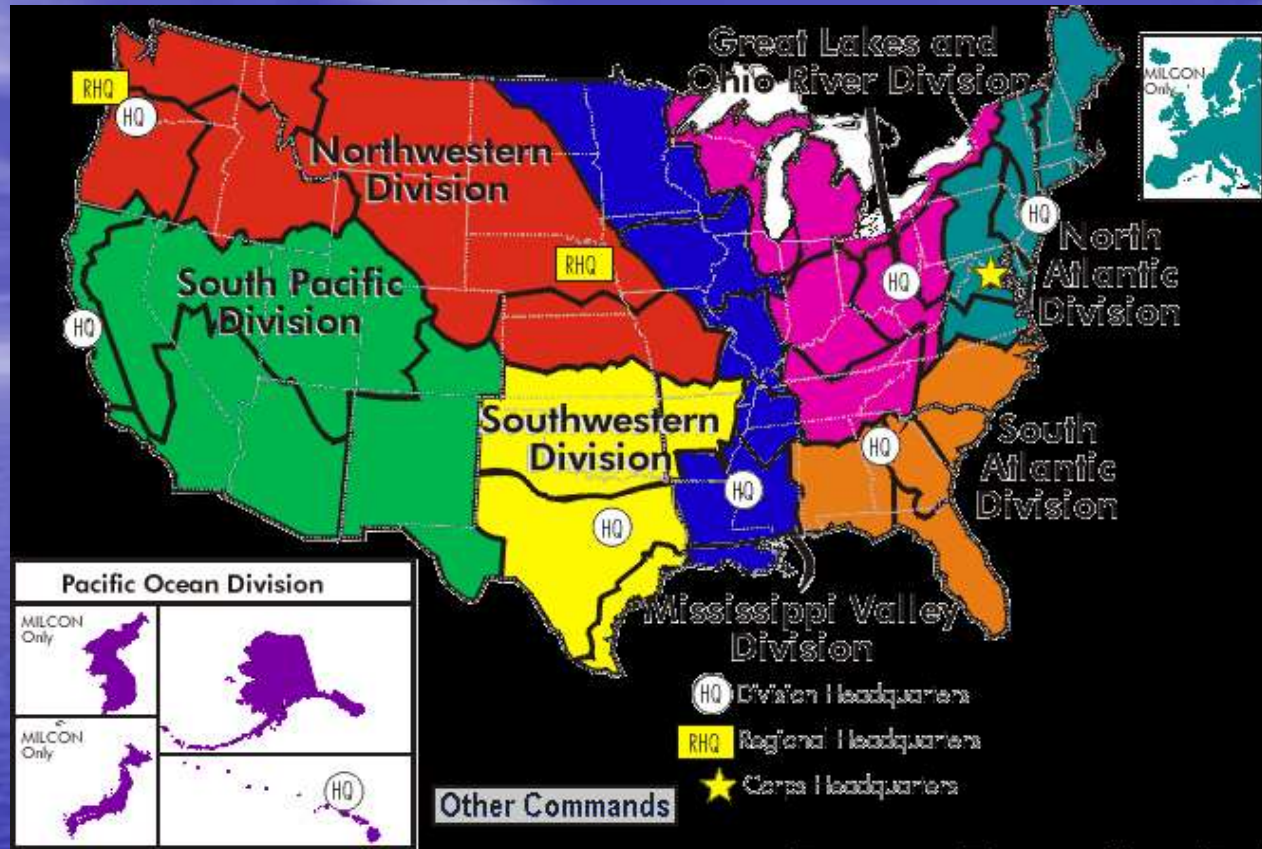


VOGEL

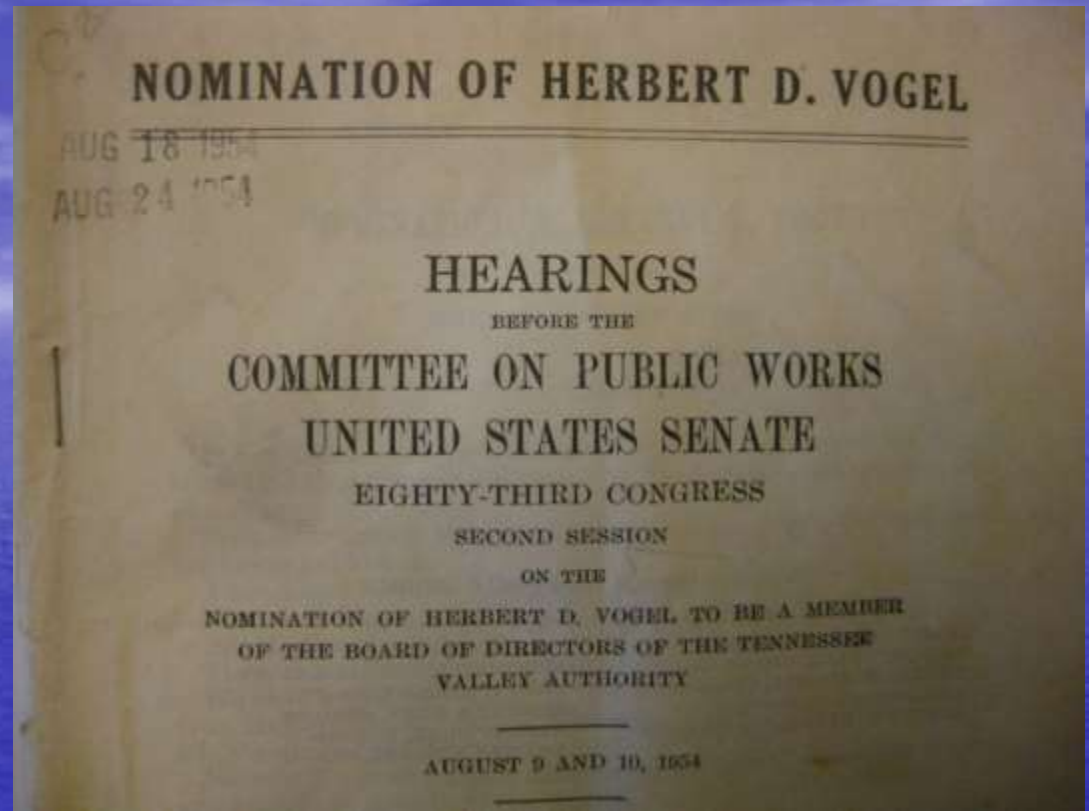
Just a year after the transition of the Canal organization to a corporate form with a complex system of financing and conducting its operations and commercial activities, Washington finds it opportune to scrap a system of promotion which up to the present has proved practical and workable. It now favors the adoption of an experiment which carries with it the implications of momentous developments.

The nomination of Gen. Seybold, of whom little is known locally, over the head of Lt. Governor Herbert D. Vogel, is the cause of great speculation among all sectors of the Isthmian community. A man of quiet elegance and penetrating thought an executive of a broad sense of equity, a citizen who always regarded himself as an Ambassador...

- In April 1952 Vogel was the first Engineer of Maintenance and Lt Governor of the Canal Zone *not* to be selected as Governor, causing all sorts of speculation in Panama.



- In June 1952 Vogel was promoted to brigadier general and appointed **Southwestern Division Engineer** in Dallas, overseeing the Little Rock, Tulsa, Fort Worth, and Galveston Districts of the Corps of Engineers.



- In July 1954 Vogel was nominated by President Eisenhower to be the next **Chairman of the Board of Directors of the Tennessee Valley Authority.**
- Vogel was grilled by the Senate's Committee on Public Works in regards to his nomination as on August 9<sup>th</sup> and 10<sup>th</sup>, 1954.

# Chairman of the TVA 1954-62

Vogel was the principal figure in transitioning the Tennessee Valley Authority to become 100% self-sustaining, in 1959. This became a model for other governmental agencies



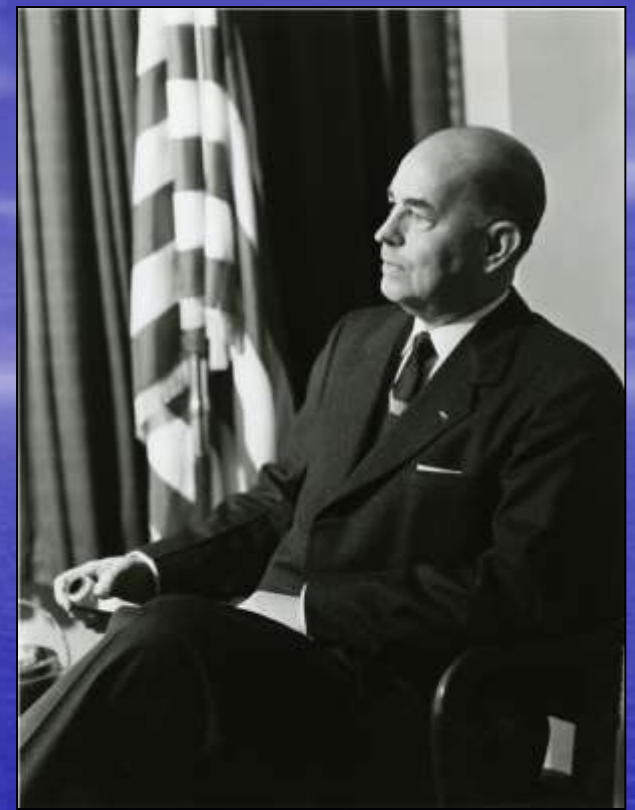
Luncheon party for Princess Sophie of Greece in Knoxville in Nov 1958.



- The TVA was the **largest electrical power system in the United States** when Vogel assumed his responsibilities in late August 1954. Here he is standing next to Norris Dam on the Clinch River.
- On August 6, 1959 President Eisenhower signed an amendment to the TVA Act making **TVA's power system self-financing**. This came after 25 years of debate between *free-enterprise Republicans* and *public-power Democrats*.



With Mexican President Cardenas at TVA headquarters



- **TVA's transition to become self-financed became a legislative model for other subsidized agencies throughout the United States, at the state and federal levels.**
- **Representatives from many foreign countries visited the TVA as well, because the TVA was the first governmental agency to develop an all-encompassing program to benefits the residents of the Tennessee Basin, providing *education* in soil science, erosion control, botany, agronomy, forestry, as well as vocational training.**

### Meets With GOP Leaders

# Vogel Won't Commit Self on Race Now

Gen. Herbert Vogel has said here that he has no political aspirations "at this time," but declined further comment on whether he might later be a candidate for Governor.

The statement followed a conference yesterday afternoon with three out-of-town Republican leaders.

"Everyone should do what he can to build a stronger Republican Party in Tennessee, but it seems fantastic that I am the one who can do that as a candidate for Governor," said the former TVA chairman.

He said he is anxious to get started in his profession as a consulting engineer. To set up an office for that purpose recently after resigning as TVA chairman.

#### Meets GOP Leaders

Gen. Vogel had an hour-long conference at his Green Ave. office with three Republican leaders, James Chastrom and Memphis, two of whom have been urging him to run for Governor.

he has been doing since he left the TVA post.

"Trying to stay out of trouble," he replied.

After the conference Mr. Brock said "Gen. Vogel's decision is complex and he's being practical. He's gathering the facts."

Mr. Brock also said, "The Tennessee Republican Party already has a nominee for Governor."

#### Meeting Called Satisfactory

Herbert Patty of Maryville is the Republican candidate to oppose former Gov. Frank Clement in the November general election for Governor.

Mr. James, Republican nominee for Congress from the Ninth District, described yesterday's meeting as "satisfactory." Mr. James said he was "very much impressed" with Gen. Vogel on their first meeting.

"I don't intend to make a unilateral candidate if he would run," said Mr. Fitzhugh.



**TO RUN OR NOT TO RUN** — Gen. Herbert D. Vogel (center), former TVA chairman, conferred



**On June 30, 1962 General Vogel announced he would step down as TVA Chairman. Vogel was so popular with business in Tennessee that the Republicans sought to draft him to run for governor, but after considering their offer, he turned it down.**



**RESIGNS**—Brig. Gen. Herbert D. Vogel, USA (Ret.), is leaving his post as chairman of Tennessee Valley Authority, effective June 30. The White House announced his resignation yesterday.

## Duties To Cease June 30; General Cites Long Service

By DUDLEY BREWER

The resignation of Herbert D. Vogel as chairman of Tennessee Valley Authority effective June 30 after nearly eight years in the post was announced yesterday by the White House.

In Knoxville the TVA chairman said he thought "42 years of government service is long enough for anyone" and "it is time to look for opportunities ahead." He added that he wants to try his hand at something else. Vogel, who is a retired major general of the Corps of Engineers, enrolled as a cadet at West Point almost 42 years ago. His rank in retirement is brigadier general. He will be 62 Aug. 26.

He said his letter of resignation was submitted to President Kennedy early in May and explained that he felt it was a good time for him to leave TVA when "as I think, things are on an even keel and going well."

## Wagner May Take Vogel Job

Aubrey J. Wagner, now a director of Tennessee Valley Authority, probably will be selected

## Two Guilty

Senior Engineering Consultant

## Vogel Accepts Job With World Bank

News-Sentinel Washington Bureau

WASHINGTON, Feb. 28—Brig. Gen. Herbert D. Vogel, who resigned last summer as TVA board chairman, has accepted a job with the World Bank, officials of the bank said here today.

He will be the bank's senior engineering consultant, replacing Gail Hathaway, who has reached the retirement age of 65. Gen. Vogel is 62.

The job involves providing advice on engineering problems in projects to which the bank is considering



Gen. Vogel

loans. His work will carry him to all parts of the world.

He probably will assume his new duties in a month or two.

A West Point graduate, Gen. Vogel was with the U. S. Corps of Engineers in Texas before he became the top man in TVA in 1954.

After he resigned from TVA last June 30, about a year before his term would have expired, he set up a consulting engineer's office in Knoxville and also became chairman of the Tennessee River Tributary Association.

He said Feb. 1 that he and Mrs. Vogel planned to leave Knoxville as soon as they could sell their Cherokee Boulevard home, but did not say then where they would go.

Future Undecided

2/4/65

## Gen. Vogel Planning To Leave Knoxville

*Geo. B. Sampson*

Brig. Gen. Herbert D. Vogel, who came here in 1954 as TVA chairman and became one of Knoxville's leading and most outspoken citizens, is leaving Knoxville.

The former Army engineer, who resigned as TVA chairman last summer, has put his Cherokee Blvd. home up for sale. "Mrs. Vogel and I plan to move as soon as we sell our house," he said today, "but I can't say for sure just where."

Gen. Vogel said that he would "most likely move to somewhere in the East, although even that is indefinite." Concerning his future plans, he said he could not reveal what they are at this time. "I have several ideas in mind, but none of them is firm yet," he said. However, he ruled out any Government post.

### Consulting Office Closed

Gen. Vogel's departure ends once and for all any political aspirations he might have had—or others might have had for him—in Knoxville or Tennessee. A "Draft Vogel" movement nearly persuaded the general to run for Governor of Tennessee last year as a Republican. However, he "reluctantly" turned down the



Gen. Vogel

Mrs. Vogel

ings here and over the Valley. Gen. Vogel quickly established himself as a speaker who asked no quarter and gave none, freely criticizing anything to which he objected, particularly the "lethargy" of state and local citizens and government toward the problems we face.

### Heads Tributary Group

Gen. and Mrs. Vogel were identified with a wide range of civic, charitable and cultural movements and programs. Among the fields in which the General held high posts were the Knoxville Symphony, Carousel Theater, Dulin Art Gallery, Boy Scouts, Multiple Sclerosis, Civil Defense, Fort Loudoun Association, Tennessee Val-

**Vogel accepted a position with the World Bank in February 1965, succeeding Gail Hathaway. The Vogels moved to Washington, DC**





- As Chief Engineer of the World Bank between 1964-67, most of Vogel's efforts concerned the **Indus River Basin Project** in Pakistan, which included the massive **Tarbela Dam**, shown here, designed by **Tippetts-Abbett-McCarthy-Stratton (TAMS)** of New York, the same firm that tried to hire Vogel back in 1946.
- Tarbela was the largest and most complicated embankment dam ever built, completed in 1976.
- It suffered significant problems with piping erosion through the foundation, scour of the spillway stilling basins, cavitation of hydraulic conduits and spillways, and acute levels of sedimentation. It also became the first project where rolcrete technology was employed, in 1979, to repair the damaged spillways.



- **General Vogel was elected to the National Academy of Engineering in 1979. His son Herbert Jr. graduated from West Point in 1952 and rose to the rank of Colonel in the Army Supply Corps**
- **General Vogel died on his 84<sup>th</sup> birthday on August 26, 1984 at Walter Reed Army Hospital in Washington, DC and buried in Arlington National Cemetery.**
- **Loreine Vogel died at age 95 in August 1997.**