

**Week X**      Thursday,      April 4

Herbert Hoover, the Globalization of American Corporate Capitalism & OIL

**Herbert C. Hoover, 1874 - 1964**

1) Biographical      2) Cultural/Historic      3) Global Ecological/OIL

1859, US, PA, Titusville, 1<sup>st</sup> OIL well

1861 - Civil War - 1865

1862, Pacific Railroad Act

1864, 2<sup>nd</sup> Pacific Railroad Act

1868, Burma - Chinese abandon Bawdwin  
silver mines

-----, Japan - Meiji restoration- beginnings of  
modernization/globalization as in Germany,  
nationalism, militarization & imperialism,  
led to rapid, unregulated industrialization

1869 - U S Transcontinental Railroad completed

1869, Egypt - Suez Canal completed

1870, US, J. D. Rockefeller forms Standard OIL Co.

c 1870 - 1914 Global - 2<sup>nd</sup> Industrial revolution -  
electrification requires copper; chemical  
industries - need sulfuric acid

1872, U S - 1<sup>st</sup> National Park created, Yellowstone

1873, Russia, Baku OIL field opened

-----, "Ecology" enters vocabulary

1874, Switzerland - Universal Postal Union  
est. by 22 nations

1874, August 10, b., West Branch, Iowa - a Quaker community

f. - Jesse, blacksmith & farm implement dealer

m. - Hulda Minthorn Hoover, a teacher and Quaker minister

b. - Theodore, born 1/28/1871

1875, France - International Bureau of  
Weights and Measures

1876 s. - May, born September 1

1876, WY Territory - Battle of the Little Big Horn

-----, Philadelphia, PA - U S Centennial Celebration

1876-78, India - over 5 million die of famine  
in two years

1876-79, China Drought, millions die

1) Biographical

2) Cultural/Historic

3) Global Ecological/OIL

- 1877, U S - Nationwide Railroad strike
- 1877, Europe, France - Louis Pasteur (1822-1895),  
germ theory of disease, vaccination, and  
pasteurization, great advances, public health
- 1880 father, Jesse, age 34, died of typhoid fever - water borne or other contamination
- 1882, U S bans Chinese immigration for 10 years
- , Egypt - occupied by Great Britain
- 1882, US, Edison demonstrates electricity
- , US, Standard OIL Trust formed
- 1883 mother, Hulda, died of pneumonia at age 34
- children separated - Hoover to farm of paternal uncle, new West Branch
- 1883, NYC, Brooklyn Bridge opened
- , Chicago - Home Insurance Building - 1<sup>st</sup> skyscraper
- 1883, Dutch West Indies, Krakatoa - cataclysmic  
volcano, = 10,000 Hiroshima atomic bombs  
120 ft. high tsunami, 36,000 killed
- 1884 Newberg, OR - with maternal uncle, Dr. Henry J. Minthorn  
enrolled at Friends' Pacific Academy, a Quaker school  
which Dr. Minthorn helped to found and conduct
- 1884, London, Maxim invents 1<sup>st</sup> machine gun
- , Belgium, Brussels, Leopold II proclaims  
"Congo Free State"
- , Canada - Canadian Pacific Railway completed
- 1885, Berlin, Congress of - 15 European nations,  
partition Africa - confirm Leopold's right to  
900,000 sq. mi. Congo Free State
- , Germany, Mannheim, K. Benz develops  
successful horseless carriage - powered by  
internal combustion gasoline engine
- , India, British begin Indus Basin - India &  
Pakistan - world's largest irrigation system
- , France, Pasteur inoculates child against rabies
- , Sumatra, OIL discovered by Royal Dutch
- , Italy, Po River Valley - 1<sup>st</sup> hydroelectric plant
- 1886, NYC, Statue of Liberty dedicated
- , U S - 100,000 strike nationwide for 8 hour day
- , Chicago, 13 killed in labor strike
- , AZ, Apache leader Geronimo surrenders

<u>1) Biographical</u>	<u>2) Cultural/Historic</u>	<u>3) Global Ecological/OIL</u>
		1886, Germany, K. Benz patents 1 <sup>st</sup> motor car
		-----, Canada, Transcontinental Canadian Pacific Railroad, completed
		-----, British conquer Burma, govern it as a province of India
		1887, South Africa, Kimberley, Cecil Rhodes consolidates control of diamond mines
1888	Salem, OR - with Minthorn family; clerk in a land settlement business founded by Dr. Minthorn and other Quakers	1888, Brazil, slavery abolished
		-----, China, 1 <sup>st</sup> railroad opened, Tangshan to Tianjin
	1889, W, DC- 1 <sup>st</sup> International Conference of American States	
	-----, US, OK - Land Rush	
		1889, France, de Lessups' effort to build a Panama canal collapses
		-----, -----, G. Eiffel competes tower
	1890, American Tobacco Co. formed by John Duke	
		1890, Scotland, 1,700' Firth of Forth Bridge completed, world's longest
		-----, Global - beginnings of world electrification
	1891, CA, Palo Alto, Stanford University founded	
1891	Palo Alto, CA - enrolled in Stanford University	
	1891, Montana, Butte - Anaconda Mining Co. incorporated with \$12.5 million in stock	
1892	summer, served on the Arkansas State Geological Survey	
	1892, NYC, Ellis Island Immigration center opened	
	-----, Riis, J., <u>How The Other Half Lives</u> exposes poverty in NYC	
	-----, ID, Federal troops break up miner's strike	
	-----, Pittsburgh, PA - Pinkerton agents break strike at Carnegie's Homestead Steel Works	
1893	summer, served on the U S Geological Survey team in CA	
	1893, J. J. Hill's Great Northern Railway completed, St. Paul, MN - Everett, WA	
	-----, NYC, Financial Panic	
		1893 - Europe/US - vaccines against tetanus, diphtheria, etc. coming into wider use

1) Biographical                      2) Cultural/Historic                      3) Global Ecological/OIL

1894 summer, served on the U S Geological Survey team in NV

## 1894, Chicago, Pullman Strike shuts down nation's railroads

1895 graduated Stanford University, B A -Geology; the first 4 year graduating class

1895 - Japan defeats China, imposes harsh terms

- Korea, a Japanese colony

----- summer, Nevada City, CA - Reward Mine, as a cart operator and driller

1896 employed as a mining engineer by Louis Janin, San Francisco, CA

worked on mine surveys in CA, CO & NM

1896, India - famine & bubonic plague rage, 4years

-----, U S, Henry Ford builds 1<sup>st</sup> car

1897 employed by Bewick, Moreing & Co. Ltd., London, England

Western Australia, managed “Sons of Gwalia” gold mine; owned a partial share

66 years later, in 1963, mine closed;

\$55,000,000 in gold, \$10,000,000 in dividends

1897, England - Marconi's 1<sup>st</sup> wireless telegraph

### 1898 - Spanish American War

## U. S. Army creates demand for food crops

1898, China - Yellow River floods, drought

contributes to Boxer Rebellion

-----, Italy, Po River Valley

- 1<sup>st</sup> large hydroelectric dam

1899 Monterey, CA - married Lou Henry, born 29 March 1875, Waterloo, IA

father, a banker; met Hoover at Stanford,

graduated 1898, degree in geology

----- honeymoon on four week voyage to China,

Hoover employed by Chinese government to oversee natural resource development

attempts to secure Kaiping coal fields - one of world's richest -

for Bewick, Moreing & Co.

1899, *Philippine Insurrection v U S*

-----, U S - declares “Open Door” policy re China

1900 China, Boxer Rebellion -

Hoover organized defense of foreign compound in Tientsin; directed relief work

1900 U S Steel Co. incorporated at \$1.4 billion

1) Biographical

2) Cultural/Historic

3) Global Ecological OIL

- 1900, Global Coal production, 700,000,000 tons -  
1,000,000,000 tons  
-----, Global - coal consumption caused most air  
pollution  
-----, Europe, Polish Silesian Triangle -Dresden,  
Prague Krakow - 2<sup>nd</sup> industrial site to the  
German Ruhr
- 1901 made a partner in Bewick, Moreing & Co.; 20% interest; London, principal residence  
Bewick, Moreing & Co. comes to control over 50% of West Australia gold  
mining  
1901 - 1<sup>st</sup> Transatlantic wireless  
1901, US, TX, Spindletop OIL gusher - the  
beginnings of Sun, Texaco & Gulf  
1902 - Texaco - Texas Oil Co. founded  
----- U S Bureau of Reclamation established  
1902, Egypt - 1<sup>st</sup> Aswan Dam completed  
1902-04, US, Ida Tarbell, History of Standard OIL Company
- 1903 son, Herbert Clark, Jr. born, London  
1903 Panama, independence from Columbia recognized by U S  
----- NC, Wright Brothers 1<sup>st</sup> successful flight  
1904 Trans-Siberian Railroad completed  
1905, Russo-Japanese War, Russians defeat  
Japanese among 1<sup>st</sup> to vaccinate troops  
1<sup>st</sup> war in which battle deaths outnumber  
disease deaths  
-----, Russia, Revolution, Baku OIL fields fired  
-----, London - 'smog' 1<sup>st</sup> coined = fog + smoke  
1906, CA, San Francisco earthquake
- 1907 son, Allan Henry, born, London  
successfully founded a zinc mining operation in Eastern Australia  
annual income approx. \$100,000 - 95% as a financial advisor  
inspected Burma's abandoned Bawdwin silver mine; contracted malaria  
comes to own 15% interest in lead smelting operation

1) Biographical

2) Cultural/Historic

3) Global Ecological OIL

- 1907, China - millions starving due to heavy rain and crop failures  
-----, Russia - 20 million starving in worst famine on record  
-----, U S, St. Louis, 1<sup>st</sup> Gasoline station
- 1908 resigned from Bewick, Moreing & C., Ltd  
founded a global mining finance and exploration firm - offices in London, NYC & San Francisco; later opened offices in Petrograd/Leningrad and Paris  
1908, Detroit - Ford produces 1<sup>st</sup> Model T  
1908, Russians open oil field in southern Caucasus mountains  
-----, Persia, OIL discovered  
-----, US, world's 1<sup>st</sup> billionaire, John D. Rockefeller, Standard OIL Company
- 1909 *Principles of Mining* - a standard text for years; remained in print until 1967
- 1910 Russia - reorganizes Kyshtim estate's iron and steel production  
Forms Maikop & General Petroleum Trust - a Russian oil resource holding company  
Invests in California oil ventures  
1910, Mexican Revolution begins  
1910, Mexico, Tampico,  
Potrero del Llano #4 OIL well  
-----, Europe & North America - electric grids powered by coal -- smoke, soot and sulfur dioxide blanketed industrial neighborhoods  
-----, England, Royal Navy began to switch from coal to oil  
1911, US, Supreme Court orders breakup of Standard OIL Trust  
-----, US, 1<sup>st</sup> high dam, the Roosevelt, on the Snake River, a tributary of the Colorado  
1911-1912, Chinese Revolution
- 1912 "*De Re Metallica*" with Lou Henry Hoover - 1<sup>st</sup> successful translation of G. Agricola's 1556 treatise on metallurgy & mining in the Erzgebirge district, Germany  
invested in Russian copper smelting, gold & zinc mining  
elected to Stanford University board of trustees  
1912, *Titanic* sinks, 1,500 missing

1)Biographical 2) Cultural/Historic 3) Global Ecological OIL

1913, U S - XVI Amendment - Income Tax ratified

-----, ---- - XVII Amendment - Direct election of senators ratified

-----, US - Detroit, Ford Motor Co. unveils moving assembly line  
Fordism & the automobile will become the most socially and  
environmentally consequential technology of the 20<sup>th</sup> century

-----, ---- - NYC, Grand Central Station - world's largest - opens

-----, Panama -Canal Opened

1914 - World War I - 1918 "The Allies floated to victory on a wave of oil"

1914 estimated wealth, \$4,000,000 – global investments

-----, CA - reorganizes finances of Sloss & Lilienthal families

London - became co-manager of the Natomas Syndicate; Sacramento area gold dredging  
and land development company

- director of 18 mining & financial companies, 100,000 + employees, global

London, Chairman, Allied Relief Committee; assisted 120,000 Americans returning to  
US

London, Chairman, Commission for Relief in Belgium; assisting 10,000,000 Belgians  
and French, invaded by German Army; \$1 billion in imports

1914, Mexico, Vera Cruz - U S troops land, oppose President Huerta

1914, Japan - 9 million reported starving

-----, Italy, Po River Valley - government funded  
irrigation & fertilizer programs

1915 San Francisco - Pan Pacific International Exposition; enlisted as a lobbyist in 1912

1914, Mexico, Vera Cruz - U S troops land, oppose President Huerta

1914 Japan - 9 million reported starving

1916, Russia- 9441 km/5867 mile Trans-Siberian Railroad completed

1917 U S in WWI - 1918

Battlefield mechanized - tanks, trucks, airplanes

1917 Hoover turns over relief operations to neutral, Spain and Holland; returns to U S

----- Food Administrator - control production, waste and prices of American food

1917 - Russia, Bolshevik Revolution - 1922

Marxist/Leninist Communism - aspired to become the  
dominant cultural value of the 20<sup>th</sup> century

1) Biographical                      2) Cultural/Historic                      3) Global Ecological OIL

1918 Grain Corporation of Food Administration begins buying, storing, selling and fixing price of wheat; prohibits use of food products in manufacturing distilled beverages

----- Requests voluntary wheatless Mondays and Wednesdays, meatless Tuesdays, porkless Thursdays and Saturdays

----- Sugar Equalization Board, Food Administration, rations sugar, 2 #s a month per person

----- Paris, headquarters for postwar European relief

1918, Russia, Vladivostok - U S, British and Japanese troops land

1918 - WWI dead = 10,000,000

1918 -19, Global - Flu epidemic kills 20,000,000

1919 Director General, American Relief Administration

23,000,000 tons of food to Allies and famine areas in Europe

23 European nations, population 300 million; \$100,000,000 in relief aid

----- transferred public American Relief Administration to a private organization to continue European relief efforts ;---- residence and offices in NYC

----- Stanford University speech in support of League of Nations

----- Washington, DC, chaired a committee studying labor/management conflicts

1919 Treaty of Versailles ends WWI ; League of Nations created

1919 US July 7-September 6, W,DC -SF, CA

## Cross Country Convoy - no roads

Eisenhower began thinking of highways

1920 name placed in nomination for president, Republican Convention, Chicago

Warren G. Harding, President; Calvin Coolidge, VP

----- Chairman, European Relief Council - coordinating efforts of American Red Cross, Friends  
Service Committee, Knights of Columbus, Jewish Distribution Committee, etc.

a strong supporter of the League of Nations

----- President, American Engineering Council

1920, US 25% of farmland devoted to animal feed;

50% of population in farm labor

1921 residence, Washington, DC

----- rejected offer of partnership in Guggenheim, American Smelting and Refining Co.

- the world's largest mining and metallurgical firm

----- Secretary of Commerce, by President Harding

----- Chairman, Unemployment Conference - 3.5 million unemployed



1) Biographical

2) Cultural/Historic

3) Global Ecological OIL

1921-23, Ukraine and Volga River Valley, Russia -

Civil war & drought lead to famine

■ 7 million + dead

-----, US, CA, Signal Hill, Alimits #1 OIL well

-----, Mexico, Tampico - 58 OIL companies; 16  
refineries - 100,000 population  
bonanza collapsed, wells filled with sea  
water; reverted to jungle scrub

1922 1<sup>st</sup> national radio conference - to regulate broadcasting

1922 Italy - Mussolini, Dictator

- imperial power rested on Alpine hydropower

----- Union of Soviet Socialist Republics - USSR - created

1922 Colombia, Lake Maracaibo,

La Rosa OIL Field opened

-----, Venezuela, OIL discovered

1923 Honored by USSR as Chairman, American Relief Administration for assistance  
in 1921-1923 famine

August, President Harding dies, San Francisco, Calvin Coolidge, President

1923, U S, Ku Klux Klan claims one million members

-----, Turkey, nationhood, collapse of the Ottoman Empire

1924 appointed by President Coolidge, Chairman, American St. Lawrence Commission  
to cooperate with Canada in developing St. Lawrence and Great Lakes Systems

----- Chairman, Colorado River Commission

1924 National Origins Act - peak KKK membership

1924, US, Teapot Dome OIL Scandal erupts

1925 recommends that CA and the U S develop the Sacramento and San Joaquin Rivers

1925 China - 3 million die in famine

1925, Hitler publishes Mein Kampf

1926 Congress enacts his recommendation to create a Bureau of Civil Aviation

----- recommends that WA and the U S develop the Columbia River Basin

1926 US, OK, Seminole OIL Field opened

----- ---, CA, San Luis Obispo, 1<sup>st</sup> Mo-tel

-----, Japan - rice farmers protest heavy metal  
deposits in rice paddies

## 1) Biographical                      2) Cultural/Historic                      3) Global Ecological OIL

1927 1<sup>st</sup> long distance television;

he was seen and heard by a group in Bell Telephone Laboratories, NYC

----- Chairman, 1<sup>st</sup> International Radio Conference, W, DC- attended by 76 nations

----- Chair, Mississippi Flood Relief; property loss of \$300 million

recommended completely revising Federal flood control program

1927, U S Mississippi River Flood - 170 counties,

killed several hundred people, formed a

shallow lake 160 km/99 miles wide

Mississippi River Basin covers 41% of

Lower 48 States

1927 - China - Mao Zedong leads Red army in

## 'Long March' to mountain retreat

----- OIL, Iraq, Baba Gurgur #1, 1<sup>st</sup> OIL well

1927 Charles Lindbergh - Solo flight of Atlantic - NY to Paris

1928    nominated for President by Republican party

----- West Branch, IA - speech on farm relief and inland waterway development

----- November, elected President, carrying 40 states to Democrat, Al Smith's 8

----- Good will tour of Latin America

## 1928 U S Drought in western states begins

1929-1933      31<sup>st</sup> President of U S

## 1929, October - Stock market crash – Great Depression

# Federal Farm Board

1930, Russia - Stalin collectivizes farms

1930 China - 2 million die of starvation

----- US, East TX, Rusk County

## Black Giant OIL field opened

1931, Austria, Creditanstalt, central bank fails - European/Global

## Depression

## 1931 Manchuria - Japan invades

1932 Reconstruction Finance Corporation created to finance public works projects,

built by private industry; vetoed creation of a federal unemployment agency

opposed federal public works

1932 Defeated by Franklin D. Roosevelt

Manufacturing 54% of 1929 levels

Unemployment, 25-30% - 12,000,000 - 15,000,000 unemployed

1) Biographical

2) Cultural/Historic

3) Global Ecological OIL

1932, Germany - 25% unemployed, 6,000,000 unemployed  
1932, Global, value of world trade ½ of 1929  
-----, Bahrain, OIL discovered  
-----, Japan, Osaka - 35,000 smokestacks;  
airplanes crash due to reduced visibility  
1933 U S - Dust Bowl in western states as top soil blown off;  
darkens the sky in eastern states, residue carried to Europe  
----- U S, Tennessee Valley Authority, created, ultimately builds over  
50 dams, some hydroelectric, + coal & nuclear power plants  
1933, Chancellor Adolf Hitler inaugurates works programs  
1933, Saudi Arabia, Socal major OIL concession  
1935, China -Mao Zedong's Communist remnant  
army ends 'Long March' in northwest China  
1935, U S - Hoover/Boulder Dam, Colorado River - dedicated. 1<sup>st</sup> giant  
multipurpose dam in the world; impounds Lake Mead, which  
extends for 115 miles (185 km); generates 1,345 megawatts of  
electricity - supplying power & water to Las Vegas  
-----, Ethiopia, invaded by Italy  
1936, Rhineland, Hitler remilitarizes; prepares for  
war, launches major synthetic fuel program  
1937, British grant Burma, constitution and self-  
government  
-----, China, Japan invades  
1938, Germany recovers from Great Depression  
1938, Mexico nationalizes OIL industry - most  
owned by U S or G B companies  
-----, Kuwait & Saudi Arabia, OIL discovered

1939 - World War II - 1945

1939 15% of U S workforce unemployed

1941- U S in WWII - 1945

-- war allows North Atlantic fisheries to replenish

1) Biographical

2) Cultural/Historic

3) Global Ecological OIL

1941, U S-G B create Atlantic Charter

-----, Lebanon proclaimed independence from France

1941, U S, WA- Columbia River Grand Coulee

Dam completed; destroyed the most

productive salmon fishery in the world

1942, US, IL, Chicago, Manhattan Project - 1<sup>st</sup> sustained nuclear reaction

**Beginning of the Atomic Age**

1943, US, WA, Pasco on Columbia River - 1,000 square mile Hanford

Engineering Works -large scale nuclear production reactors; built

the atomic bomb dropped on Nagasaki; dumped billions of gallons

of nuclear waste into the Columbia River

c 1943 to c 1990 - Cold War between US/Allies & USSR/China

1944, U S - World Bank & International Monetary Fund founded

1944, Lebanon, power transferred from French

1945 U S, two atomic bombs on Japanese civilians

1945, Dutch West Indies, Republic of Indonesia declared

1946, London - United Nations 1<sup>st</sup> session

-----, Vietnam - Vietnamese begin war for independence v French

-----, US, MO, Fulton - Churchill's Iron Curtain Speech

1946-1948, USSR spreads Soviet-style pollution

intensive industrialism to Poland,

Czechoslovakia, East Germany & Hungary

1947-1949, Chair, Federal Commission to eliminate waste

lead to creation of the General Services Administration, 1949

1947 Marshall Plan to revive Europe announced

----- National Security Act

1947, India and Pakistan independence

1948, Burma, Ind. - new nation Myanmar

-----, Israel created

-----, Persian Gulf, OIL fields opened

-----, United Nations create

World Health Organization

1949 U S organizes North Atlantic Treaty Organization - NATO

----- National Security Act

1949, China - People's Republic established

1) Biographical      2) Cultural/Historic      3) Global Ecological OIL

1950 - Korean War - 1953

1950, Vietnam, President Truman sends 35 military advisors to aid French  
beginning of Vietnam War, to 1975

1950 - 1954, Joseph McCarthy, Red Scare

1950-1955, Chainsaws revolutionized logging and  
pulping in North America

1950-1970, Global, estimated 20,000,000-  
30,000,000 people killed from air pollution

1950-1973, Europe, Germany - *Wirtschaftswunder*  
economic recovery

- Rhine River further polluted - sewage,  
detergents & fertilizers

1950, Global Population, 2.557 billion;  
19% increase since 1940

-----, Global Tropics - population growth, land  
clearing

-----, Japan, begins coal-based re-industrialization

-----, India, Calcutta - population, 5,000,000

-----, USSR, Aral Sea - world's 4<sup>th</sup> largest lake

-----, China, successful communist revolution leads  
to improved public health service

-----, US 50+% of corn, hybrid

-----, Norway's dominance of modern whaling,  
superseded by Japan; factory ships,  
airplanes, sonar

-----, Africa, Lake Victoria - Nile perch - 7 ft long/  
300 # weight - introduced eliminated over 1/2  
fish in lake; supported export industry to Israel

-----, Global - OIL becomes the single most  
important factor in shaping environmental  
history

-----, South and Central American rain forests  
become cattle ranches to supply U S beef

1) Biographical

2) Cultural/Historic

3) Global Ecological OIL

- 1951, U S detonates H-bomb
- 1952, Egypt, Nasser seizes power/British out
- 1953 Chair, Federal Commission to eliminate inefficiency in government  
lead to creation of Department of Health, Education and Welfare, 1953
- 1953, London, DNA shown as double helix
- 1954, Vietnam, Geneva Accords; French withdraw; North and South  
Vietnam created; elections promised but never held due to U S  
resistance
- 1956, U S - National Highway Defense Act
- , Egypt, Nasser nationalizes Suez Canal  
Israeli/British/French force attempts to  
regain. UN forces invaders out
- , Niger, OIL discovered
- 1957 U S - smoking shown to promote cancer
- , Europe, European Economic Community est.
- , Russia, Sputnik launched, beginning of  
USSR-US space race
- 1958, Lebanon, civil war - Maronite Christians, Sunni & Shi ite Muslims  
US sends troops to restore order
- 1959 U S-Canada, St. Lawrence Seaway opened
- 1959, China, famine kills 25 million -30 million
- c 1960, Africa - Acquired Immune Deficiency  
Syndrome, AIDS 1<sup>st</sup> jumped from  
chimpanzees to human hosts
- 1960, Global Population, 3.039 billion  
22% increase since 1950
- , US, OH, Cleveland - Cuyahoga River  
so polluted it frequently catches fire
- 1961, Berlin - Communists build wall
- 1962,US, Rachel Carson, Silent Spring

1) Biographical      2) Cultural/Historic      3) Global Ecological OIL

1963, W,DC - March On, 200,000 - MLK, Jr. 'I have a dream'  
-----, W, DC-Moscow, hot-line phone link, avert war  
-----, TX, Dallas, President Kennedy shot and killed  
          Lyndon B. Johnson becomes President  
-----, Betty Friedan, The Feminine Mystique  
          1963, US - 1<sup>st</sup> human heart transplant  
-----, Italy, Pope John XXIII dies  
-----, Vietnam, 15,000 US military advisers

1964, October 2, d., NYC

1964, MI, 3 civil rights workers- Schwerner, Goodman, Cheney- murdered  
          7 convicted by Federal jury  
-----, US, Congress passes Tonkin Gulf Resolution  
-----, US, Beatles appear on 'The Ed Sullivan Show'  
          1964, US - Glen Canyon Dam, Colorado River,  
          dedicated; no significant new projects  
          followed due to environmental protests  
-----, US, Colorado River controlled by 19 dams;  
          irrigated 12,550 sq.km/4,845 sq. m =  
          Connecticut or Lebanon;  
          15,000,000 people depended on its water  
-----, South Africa - Nelson Mandela sentenced to  
          life imprisonment for treason  
-----, USSR, 1<sup>st</sup> 3 man space craft returns  
-----, China, explodes 1<sup>st</sup> atomic bomb  
-----, Germany - requires biodegradable detergents  
1965, USSR bans leaded gasoline

Readings:

Herbert Hoover, 1874-1964; chronology-documents-bibliographical aids,  
          edited by Arnold S. Rice, 1971  
Lyons, E., Herbert Hoover: a biography, 1964  
McNeill, J. R., Something New Under the Sun: an environmental history of the twentieth-  
          century world, 2000  
Nash, G. H., The Life of Herbert Hoover: Vol. I -The Engineer, 1874-1914, 1983  
Yergin, D., The Prize: the epic quest for oil, money & power, 1990