Engineering

Electrical Engineering

Joseph T. Tykociner Papers, 1900-1969

Box 1:

Lists of Membership in Professional Societies and Fraternities

Diplomas and Educational Record

High School Diploma (1900 in Russian)

Diploma - Hoheres Technical Institute at Cothen (1901 in German)

Russian Certificate, 1903

University of Göttingen Record, 1927-28 (including Photograph of J.T. Tykociner)

Awards, 1922-63

Sigma Xi, 1922

The American Physical Society, 1923

Associate - American Institute of Electrical Engineers

Synton (Professional Radio Fraternity), 1925

The American Radio Relay League, 1926, 1927

Nomination for Fellow, American Physical Society, 1930

The Illinois Academy of Science, 1930

Fellow, American Association for the Advancement of Science, 1930

The National Geographic Society, 1930

Fellow, The American Physical Society, 1931

The American Institute of Electrical Engineers, Recognition of Tykociner as Section Chairman, Urbana, 1927-28; 1937-38

Eta Kappa Nu Association, 1962

Phi Kappa Phi, 1963

The Institute of Radio Engineers, appreciation for financial support, no date

Award of Merit, National Electronics Conference, 1964

Fellow, The Institute of Electrical and Electronics Engineers, 1964

Doctor of Engineering, University of Illinois, 1965

Loyalty Award, Illinois Alumni Association, 1967

Membership Cards

Business Cards - Siemens and Halske (German and Russian)

Engineer - Ministry of Radio and Telegraph

American Association of Scientific Workers, 1942-43, 1946

American Institute of Physics, no date

War Manpower Commission, National Roster of Scientific and Specialized

Personnel, 1944

University of Illinois, I. D. Research Professor Emeritus, 1946

Urbana Library Card, 1949

University of Illinois Alumni Association, 1952

The Philharmonic - Symphony Society of New York, 1956-1957

Life Member - The Institute of Radio Engineers

Selective Service Registration Certificate, U. S., 1960

Voting Registration Certificate, U. S., 1960

University of Illinois Alumni Association, 1969

American Association of Retired Persons, 1969

United Nations Association of the United States, 1969

Society of Sigma Xi, 1969-70

1902-1919 - General Correspondence

Letter of recommendation, The International Electric Company, London, 1902

Marconi Wireless, London, 1903

Siemens and Halske Company, Russia, 1918

Physician documentation confirming Tykociner's illness, Petrograd, June 3; September 11, 30, 1918, and Warsaw, November 28; December 28, 1918

Ludwig Silberstein, 1919

Curriculum Vita c. 1919

9/16/1919 - Letter from Cecelia - cousin of Joseph Tykociner. She mentions her two children, a girl, 7 years old and a boy, 3 years old.

9/16/1919 - Letter from Cecelia's mother Marja from Chicago.

12/12/1919 - Copy of a letter from Mr. Bride, American Consulate in Warsaw to Tykociner, giving instructions of how to receive a visa to America (in Polish)

Passports

U. S. - Helen T. Tykociner (6/6/31, #399817) and Joseph T. Tykociner (7/25/27, #4427.3)

Poland - Helena T. Tykociner (8/8/20, #5785) & Joseph T. Tykociner (8/13/20, #5764) Russia - Joseph D. T. Tykociner (1906-1987, #1315)

Documents

Permit to reside in St. Petersburg while working for an electrical company -Siemens and Halske, 1907

Train coupon, Paris-Bucharest with seal of "Mission militaire française"

Permit to reside in Petrograd - 1916

Note certifying Tykociner's passage on the S. S. Megantic from Liverpool on August 8, 1919

Train Coupons (2) for the Orient Express

A. #81 Zurich to Vienna, October 9, 1919

B. #498 Vousovie (?) to Paris, June 24, 1919

Correspondence regarding job possibilities, 1920-21

Dismissal at Westinghouse, 1921

Ellery Paine

Dean C. R. Richards

C. M. McConn, Assistant to University of Illinois President

Thomas C. Mackay

Peter Kapitza

Ralph W. Armstrong

Ludwig Silberstein

1/13/20 - Polish Department of Railroads requesting technical advice from Tykociner on the feasibility of establishing telegraph linkage between their railway stations. (in Polish)

Correspondence with Polish Government, 1919-1920 (in Polish), Warsaw, April 6, 1920, Ministry for Army Affairs, Department of Army Communications, authorizing Tykociner to collect information of the development of English and United States telegraph operations, especially Army communication systems and to purchase any material that might be needed for the installation of Poland's telegraph system. Other correspondence includes a project devised by the Polish Ministry to build a national Radio-Telegraph Institute; proposal that Tykociner be responsible for the project with his duties enumerated in 22 points; protocol from the Radio-Telegraph Commissioner's Section, inviting Tykociner to the next meeting.

1922-1929 General Correspondence

Lloyd P. Garner, Hope Natural Gas Company

Helena Tykociner, Mayo Clinic, 1924

Citizenship Correspondence, 1925

Naturalization Papers (Helena & Joseph) 1927, includes information about

Joseph's birth

Box 2: General Correspondence, 1927-1959

U. A. Sanabria and <u>Chicago Herald and Examiner</u>, 1925-26, regarding Tykociner's professional advice on Sanabria's television device and legal matters in compensation for same

1930-1939 - General Correspondence

Kate and Aubrey J. Kempner

Ellen Kempner

Nicholas Oboukhoff (Oklahoma A & M)

Ralph W. Armstrong

Louis V. King (McGill University)

Clarence Darrow - soliciting funds for the Victor L. Berger National

Foundation

D. O. Whelan, President R. C. A.

Ludwig Silberstein

Felicja Fuks; Warsaw; Polish, 8/26/34 - About illness and money problems. Her daughter asked her to live with them. Helenka sent Felicja money (\$25 twice)

B. Mikles(z)ki in Polish, 12/27/39 in answer to a letter from Tykociner from a POW camp in Hungary. He was, before the war, President of the largest manufacturing company of enamel products in Poland. He was an army officer during the war and narrates the first months of war in Poland.

Dorothy (?) Altkaufer, 1/2/33 to Helenka about the bad situation in Poland, no jobs, and letter from son, Jedaus, (5 years old) written by mother. (Polish)

From Marja Sep...?, 11/29/32 - About difficulty publishing high school stories arranged by her and an English teacher in English due to bad times in Poland (Polish)

Newspaper article - Helenka Tykociner's translation and correspondence on the death of Jacob David Tykociner (June 22, 1932), J. T. Tykociner's father. Article relates that the father was the most important philanthropic personage of the Jewish community in Wloclawek, having begun and worked with homes for the aged.

Harry W. Chase

Simon Gottschall

Jacob Chaitkin, regarding Tykociner's philosophical views, 4/26/33

Vladimir K. Zworykin

A. C. Benjamin (University of Chicago)

Menge (Marquette University)

Marion Woodruff

Mabel Paine

W. H. Laning, Jr.

Lloyd P. Garner

Tykociner to Senator William Borah, 4/20/38

Correspondence regarding Tykociner's Publications, 1935

Helenka Tykociner's Material on Women's International League for Peace, 1930's

Correspondence, B. E. Shackelford, RCA, 1940

University of Illinois Retirement Correspondence, 1946-1948

Letters to be answered, 1947

1940-1949 - General Correspondence

Mr. and Mrs. Aubrey Kempner

David Kinley

B. E. Shackelford (RCA)

Benton Baker

Vladimir K. Zworykin

George Glan

National Defense Research Committee

Natalie R. (11/15/40) About her sister's family in Warsaw and attempts to bring her to the United States; about European situation

Guest Book - kept on Tykociner's Retirement, 1949

1950-1959 - General Correspondence

Aubrey and Kate Kempner

Eleanor Pick

Photos, David Woodruff

Mrs. Woodruff

Karl Windesheim

Dinner - honor of Vladimir K. Zworykin, RCA

Photos, Mr. and Mrs. Zworykin, 1955

Mr. and Mrs. William L. Everitt, 1955

President Nathan Pusey (Harvard) "Science in the University"

Correspondence on Helenka's Death, 1953

Tykociner's Medical Problems, 1954-55, 1967

N. P. Bogoroditski, Director of the Leningrad Electrotechnic Institute, U.S.S.R., on Alexander Popov, 1959

<u>Box 3</u>:

1960-1963 - General Correspondence

1964-1969 - General Correspondence

Ben and Luba Kowalski (also see correspondence in Kowalski folder, Box 6)

W. A. Laning

Ellery and Olive Paine

Heinz Von Foerster

George Glan

Aubrey and Kate Kempner

Charles and Hilde Minz Bead (Also see correspondence Minz folder, Box 7)

Canadian Peace Research Institute

The Institute of Electrical and Electronics Engineers

Eleanor Pick Katzman

President David D. Henry

Kurt and Ruth Jacobson Kaufmann (Also see Correspondence Jacobson folder,

Box 6)

Jack W. Peltason, Chancellor of the University of Illinois

Photos of President and Mrs. David D. Henry

Christine (Kowalski) Nemeth and family

Correspondence, no date; no last name

Outgoing Correspondence, 1921-1937

1921 - Request for research instruments, 11/25/21

1922 - Request for information regarding sprocket on film projector, 10/16/22

1923 - Letter of recommendation for Oboukhoff to Goldsmith, 5/24/23, CCNY

1924 - Request to P. M. Abbott, NYC, for permission to publish sound on film article, 1/21/24

1925 - Request for papers by other authors, 1/27/25

1926 - 1928

1929 - to Jakob Kunz regarding doctoral thesis of Amelotti, 6/5/29

1930 - to Brown, Jackson, Boettcher and Dienner on sound on film patent cases, 12/15/30

1931 - to Willard A. Laning, Jr. on travel plans and research, 9/19/31

1932 - 1934

1935 - Proposal by J. T. Tykociner - "Student Inventors Shops and Research Laboratory" for creative minded undergraduates, 1/9/35

1936 - 1937

Box 4:

1921-1939- Societies and Men of Science

University Friends of Poland, 1932-34

The Institute of Radio Engineers

American Institute of Electrical Engineers

Society for the Promotion of Engineering Education

LLoyd P. Garner

H. A. DeVry, President - The DeVry Corporation

Questionnaire Who's, Who Among North American Authors, 1929-1930

National Geographic Society

S. Bernheimer, President, Radio Association of America

The Association of Polish Intercollegiate Clubs

Vladimir K. Zworykin

Nicholas Oboukhoff (Oklahoma A & M)

Resolution on the death of Jakob Kunz, October 3, 1938

Dr. Menge

Arnold Emch

1940-1949 - Societies and Men of Science

Dr. Severinghous,

American Physical Society

Introduction of Zworykin to Sigma Xi, 1941

University Friends of Poland

W. H. Wheat, Representative 19th Congressional District

Vladimir K. Zworykin

Arnold Emch

Who's Who in the Western Hemisphere, 4/9/44

Data for Who's Who, Engineering, 1944

Biographical Encyclopedia of the World, September 8, 1944

Louis R. Bloom

The Institute of Radio Engineers

Who's Who in Illinois, 1946

American Association of University Professors

American Men of Science, 1949 information

Two Polish Letters, Consulate General of Poland

1950-1959 - Societies and Men of Science

Senator Brien McMahon on U. N. Genocide Convention, 1/23/50

Information for National Scientific Register Physics, 12/27/50

The Institute of Radio Engineers

American Institute of Electrical Engineers

Polish Institute of Arts and Sciences - American

Answer to Retirement Questionnaire, 3/17/52

To George Stoddard on resignation, 8/26/53

Reply by Stoddard, 8/28/53

American Men of Science

American Institute of Physics

To John Bardeen on Nobel Prize, 12/23/56

Robert Nau, Ohio Northern University

Oren Harris, Washington, D. C., July 15, 1958

From William L. Springer, Washington, D. C., July 17, 1958

American Society for Engineering Education

1960-1969 - Societies and Men of Science

Register of Scholars and Scientists of Polish Background in the U. S.

American Institute of Physics

President E. W. Ernest, National Electronics Conference on Award of Merit, June 15, 1964

Robert Nau, School of Mining and Metallurgy, Missouri

President Ernst Weber, The Institute of Electrical and Electronics Engineers on receiving grade of Fellow, November 11,1963

Discussion on Communications and Zetetics with Ben Lieberman, Columbia University, 1962

Correspondence A-F, 1923-1969:

Heinz and Rudy Britzmann (Ella Kempler Britzmann)

December 1937 - July 1942

Heinz (English)

Rudi (English)

Mother - Ella (German)

Joel C. Hudson, American Consul, Berlin

Rexford Newcomb, Dean of College of Fine and Applied Arts

Fritz Segall, Council of German Jews, Berlin (German)

Hebrew Sheltering and Immigration Aid Society of America (HIAS)

Jacob Chaitkin, 1931-1933; L'Urbain Insurance Company and First Russian Insurance Company Jacob Chaitkin, Attorney at law

Correspondence Regarding L'Urbain Insurance Company, 1931-33

Letters regarding J. T. Tykociner's Inventions, June, September, 1931

Correspondence on L'Urbain Insurance Company

Receipts in Russian

Correspondence regarding Samuel Goldman (J. T. Tykociner's brother-in-law's insurance claims in the First Russian Insurance Company, 1931-33

Also correspondence referring to Mrs. Tykociner regarding her car accident, October 21 and 27, 1933

Letter to Florence and Milward Pick, June 1, 1931

Marion Pick Frazao and their children, 1946-1969

Photographs of children (John, Betsy and Angela), 1963

Letters from Marion, Celso and the children and correspondence to them from J. T. Tykociner, photographs of children, 1966

Doris Altkaufer, 1933-1938 (in Polish) (son-Andrzej - nickname, Jedrus)

8/20/33 - 1/4/36 - Detailed descriptions about what is happening to Germany and her visit there. She writes about the oppressive atmosphere, Hitler's youth movements, the destruction of all monuments and artistic works created by Jews. 1/4/36 - 2/2/36 - Personal matters and philosophy towards life. 8/27/36 - About the death of Dr. Ozjasz Thona in Cracow, the only Jewish Senator in the Polish Congress (Sejm). 12/15/37 - About anti-Semitism in Poland; in the universities and destruction of Jewish stores. 8/10/37 - 11/15/38 - on personal matters and Polish situation regarding Jews.

Box 5: Correspondence, 1923-1969

Adam Goldman (Glan), 1934-1967 (Polish)

Opato'w Kielecki, Poland, 4/29/1934 - Preparations to go to Israel 7/24/1934 - About his preparations to go to Israel and live in a

kibbutz

Italy, 9/19/1938 - About his travel (on his way to Palestine) personal

Kfar-Saba, Israel, 10/9/1938 - His first impressions about the life in a kibbutz

11/29/1938 - personal

12/21/1938 - About the contemporary life in a kibbutz, personal, he changed his name to Adam Glan as did his brother Jerzy in America. Jerzy lives with the Tykociner family.

2/7/1939 - About kibbutz, relationship between Arabs and Jewish people

2/10/1939 - He's not satisfied with the life in the kibbutz,

personal.

1/20/1939 - Personal, all the time he mentions Arthur Eibsaye - a friend?

2/10/1939 - personal

2/29/1939 - Mention his diary about the life in the kibbutz, hopes to finish it soon and send it to the United States in order to publish it. Arthur got married, he has a daughter Mera.

3/12/1939 - Personal, defense against the Arabs, general description about the life

3/24/1939 - Personal

4/11/1939 - Personal

4/7/1939 - Personal

4/30/1939 - Personal, studies in mechanical engineering from books which are sent by Benek Kowalski and J. Tykociner

5/14/1939 - Personal

6/4/1939 - Personal

6/26/1939 - About his plans to leave the kibbutz

7/6/1939 - Personal, plans to leave the kibbutz

7/12/1939 - Personal, plans to leave the kibbutz

8/27/1939 - Personal, he's asking for financial help

8/13/1939 - Personal 9/27/1939 - Personal

10/15/1939 - Personal, mentions his visit at Jacobson in Tel-Aviv 11/19/1939 - Personal, Regards from Gucia Frankenberg, the daughter of Balbina and Jacob Frankenberg. Jacob is a cousin of Joseph Tykociner. She (Gucia) sends also regards to her aunt Ludka and her daughter Reggy (Regina)

Letters from Arthur Eibesaye to Tykociner (in German). Tykociner was sending money to Arthur Eibesaye for Adam Glan, who, being in a kibbutz, could not get money.

October 10, 1941, October 21, 1941 - From Jerzy to Mrs. Tykociner, asking information about sending packages to Poland, especially through the Astong Company; list of product prices from Astong, Contact Service Company

October, 1941 - More information about the possibilities of sending packages 9/17/1967 - Letter mentions J. T. Tykociner's operation

Correspondence, Julia and Jacob (Samuel Jacob) Goldman, George Glan (Goldman), Ludka Goldman, Dr. Mauryey Reichert, 1920; 1921; 1924; 1928-34 (in Polish) Includes receipts for monies sent to Poland and: 10/28/29 - Jacob about family matters. 3/31/29-1/6/31 -Jacob, Ludka about Leon Goldman's illness; Adam is in the Polish Army. 1/17/31 - Jacob regarding the problems they're having with the property in Gdansk-Langfur.4/28/31 -George about his studying. 9/7/31/ - Helenka is on a trip in Europe, touring Germany. Czechoslovakia and France. 9/11/31-9/17/31 - Jacob about court ordering suspension on the payment of rent for the property, a trial will be held 10/10/31. 9/28/31 - Jacob about the poor economic situation in Poland; Ludwik Kowalski went bankrupt; Jacob cannot sell his business; they lost the trial, a new one will be held 10/22/31. 9/19/31-10/6/31 family matters. 11/9/31 - from Ludka on the difficulties in keeping the factory which was closed down. 11/18/31-2/12/32 - Business conditions in Poland; the family's financial problems; Jozef develops eye trouble (11/18/31); details about the property trial; J. T. Tykociner's father undergoes surgery (2/12/32). 3/6/32- Mauryey Reichert gives medical advice for Helenka's illness. 3/9/32 - Jacob regarding the trial. 3/13/32 -Adam asks for financial aid. 3/15/32-3/19/32 - about the fathers' surgery; trial, George's studies. 3/29/32 - Ludka regarding the father's illness; her divorce trial (from Reichert). 4/8/32-5/20/32 - Regarding property trial; divorce trial; business problems. 5/27/32 -Wedding greetings from the entire family. 6/8/32 - 7/1/32 - Regarding economic crises; Jozef's eye trouble; father's illness; poor financial situation in the Tykociner and Kowalski family. 7/2/32 - Jacob and George; Jozef has to go to Vienna for eye surgery. 7/5/32-8/12/32 - family problems. 8/28/32 - Jacob, Julia, Adam and George; George plans to study in France; Adam cannot find a good job and is working in his grandfather's print factory in the meantime. 8/30/32-10/28/32 - family matters. 10/28/32 - Julia and Jacob; George went to Paris. 11/1/32 - Julia and Jacob; Joseph has had four eye operations in Vienna. 12/19/32 -New Year greeting from Julia and Jacob. 12/16/32 -Jacob; They plan on sending Adam to Palestine because of poor job conditions in Poland. 12/27/32 - Jacob regarding the difficulties in closing his business. 12/28/32 - Ludka; She received her divorce; the father's print factory is finally closed but not sold. 1/14/33-2/3/33 - family matters. 2/27/33 - Ludka mentions the problems J. T. Tykociner had with the building of his new house. 3/7/33-3/16/33 - George's studies in France. 3/25/33 from Ludka, J. T. Tykociner takes a cut in salary. 4/17/33-8/21/33 - Regarding expected inflation in Poland, devaluation of the currency; property trial. 10/13/33 - Ludka, mentions Helenka's car accident. 10/19/33 - Jacob gives a detailed description of his financial affairs. 10/20/33-5/22/34 - family matters. 5/24/34 - Ludka, their father is very ill. 6/7/34 - Ludka regarding Leon Goldman's death (4/11/34); the family kept his death a

secret from Helenka until this letter. 6/22/34 - Julia and Jacob send their greetings on the 25th anniversary of Helenka and Joseph's marriage. 6/28/34-9/22/34 - family matters. 10/25/34-10/28/34 - Adam is preparing to go to Palestine. 11/1/34-11/28/34 - family matters. 12/1/34; 12/15/34 - Ludka writes that George is unhappy in his studies in France and cannot find a job.

Correspondence, Julia and Samuel Jacob Goldman, Frances Kowalski, Ludka Feldman, Adam and George Glan (Goldman), Dr. Mauryey Reichert, 1935-1936 (in Polish) 1/1/35 - Julia about family matters. 1/25/35 - Ludka about her divorce and possible marriage to a Mr. Naum; she is a dentist. 2/1/35; 2/15/35 - family matters. 2/27/35 - Details regarding business and financial problems of the entire family. 3/6/35, 3/15/35, 3/18/35 - family matters. 4/1/35 - Jacob and Julia send birthday greetings to Helenka. 4/5/35, 4/15/35, 5/2/35 - family matters and the memorial one year after Leon Goldman's death. 5/15/35-6/15/35 -family matters. 7/3/35 - Jacob and Julia regarding the serious illness of J. T. Tykociner. 7/15/35-7/21/35 - family matters. 7/22/35 - M. Reichert prescribes a diet for J. T. Tykociner. 8/2/35-8/15/35 - family matters. 9/1/35- Adam Glan has difficulty in getting a certificate in order to go to Palestine. 9/6/35 - Ludka about her vacation in Yaremiec. 6/19/35 - Julia and Jacob about family matters; J. T. Tykociner and Helenka went to Colorado for a vacation. 11/28/35 - Helenka to her relatives offering to help George find a job in the U.S. 10/15/35; 10/23/35 - Julia and Jacob; Jacob; on difficulties in finding jobs in Poland and the possibility of George going to the U.S. 10/28/35 -Ludka regarding problems over the factory Leon Goldman had owned; Ludka lost her job in a public clinic. 11/1/35-11/15-35 - regarding surgery of Jacob; George's plans to go to the U. S. 16/11/35 - Ludka is unable to find a private dental practice; financial situation is very difficult. 12/1/35-3/1/36- family matters; Jacob's physical condition, Jacob's business situation. 3/6/36 - J. T. Tykociner to Jacob about his operation questions him about the political and economic situation in Europe. 3/16/36-4/9/36 - family matters; Adam's plans for the future; George's preparations for obtaining a visa to the U.S. 4/14/36 - Ludka writes in detail about the members of the Goldman family. 4/15/36; 5/1/36 - family matters. 5/3/36 - from Jacob re the situation in Poland. 5/14/36-6/17/36 family matters and George's preparations to go to the U.S. 6/26/36 - M. Reichert prescribes a diet for J. T. Tykociner. 6/26/36-7/15/36 - family matters; the poor financial situation; Ben Kowalski lost his job. 7/24/36 - M. Reichter cannot find a job. 8/1/36-9/8/36 - family matters. 8/12/36 - George Glan received his visa and plans on leaving Poland in October, 1936. 19/12/36-9/1/36 - Regarding plans for George's trip to the U.S. 9/15/36; 9/17/36 - Details about George's journey. 9/22/36- 10/24/36 - Family matters and details on the trip. 11/3/36 - George is on his way to New York. 11/12/36 - Jacob and Julia about general matters.

Correspondence. Julia and Jacob (Samuel Jacob) Goldman; Ludka Feldman; Ludwik and Francis Kowalski; Ben Kowalski; Adam and George Glan (Goldman), 1937-1939 (in Polish). J. T. Tykociner turns over his inheritance left by his brother Moses Tyler (Tykociner) to his mother and sisters. 9/12/37 - Ludka about Anti-Semitism and violence against the Jews. 10/24/37 - Jacob and Julia about the death of Maurice Tyler. 11/8/37 - Jacob, Julia, Ludka and Benek about Benek's plans to visit the U. S. 9/11/37 - About the family and the Jewish situation in Gdansk. 11/29/37 - From Karl Newmann (Goldman's lawyer) to Samuel Jacob Goldman on the property in Gdansk (in German). 12/15/37-2/9/38 - Family matters. 3/7/38 - Adam is waiting for his certificate to go to Palestine. 3/7/38-4/18/38 - About family matters. 5/17/38 - Jacob and Julia. Benek came back from the U. S. 5/29/38 - Wedding greetings from the family to Helenka and Joseph Tykociner. 6/27/38 - Ludka mentions Helenka's illness. 6/25/38 - Jacob is advised on what J. T. Tykociner has to do in order to give up his share of the will. 6/17/38-6/23/38 -

About family matters. 6/23/38 - Details about members of the family living in and outside of Poland. 6/27/38 - Family matters. 6/29/38 - Jacob regarding the oppressive situation in Germany. 7/5/38-7/28/38 - Family matters. 8/8/38 - Julia to Jerzy on Adam leaving for Palestine. 8/16/38-8/25/38 - Family matters. 9/5/38 - Julia mentions that Adam left Poland (8/30/38). 9/9/38-9/27/38 - Family matters. 10/7/38 - Julia and Jacob, Adam is in Palestine. 10/10/38-10/14/38 - Julia and Jacob write that the inheritance matter is finished. 10/17/38-11/30/38 - Family matters. 12/1/38 - Jacob to Helenka on advice about her illness. 12/1/38 - Jacob and Ludka that Adam changed his family name from Goldman to Glan as did Jerzy in the U. S. 12/22/38-12/29/38 - Family matters. 12/31/38 - Jacob sends New Year greetings and hopes for a better time for Jews in Poland. 1/19/39-1/20/39 - Family matters. 1/19/30-2/14/39 - on Benek's problem in staying in his business. 2/19/39-2/22/39 - Family matters. 2/10/39 - Benek writes important details about the situation in Poland. He plans on going back to the U.S. 3/6/39 - Julia about the family. 3/22/39 - Jacob writes about his many friends who are leaving Poland. People are afraid and uncertain. 4/3/39 - Ludka writes about the difficulties in Poland: no jobs are available, extreme tension, poor salaries, and the difficulties for the Jews. 4/12/39 - Family matters. 5/21/39 - Julia and Jacob on the war situation in Europe. 5/31/39 - Benek writes of future plans. 6/3/39 - Family matters and a short philosophical essay from Joseph. 6/25/39 - Jacob on family matters. A card from J. T. Tykociner to Helenka. 7/16/39 - Jacob on the European situation and problems in getting a visa to the U. S. 8/7/39 - Benek on trying to get a visa to the U. S. 7/18/39-8/24/39 - Family matters. 8/31/39 (Chicago) - George writes J. T. Tykociner about his opinions on the coming war in Europe.

Rosalie Goldman at Waldau, Switzerland, 1923-33

Professor Speyr, Director at Waldau

Letters to Rosa, 8/17/27; C. 1927 (Polish)

Receipts for payments by Joseph T. Tykociner (German and English)

Frau Louise Koeniz (German)

Frau Strasser (German)

Dr. Weber (German)

Director Klasi

Dr. Walther

4/1/23; 6/28/24 - Correspondence with the Tykociner's regarding Rosa's paintings and her illness (in Polish); 3/10/29 - letter from Helenka to someone who knows Rosa (in Russian).

Rosalie Goldman - Waldau, Switzerland, 1934-46

Receipt for payments (German and English)

Dr. Weber (German)

Rosalie Goldman (Polish and German)

Dr. Verwalter (German)

Director Klasi (German)

Fran Strasser (German)

Fran Koenig (German)

Correspondence 1934-36; 1938, 1942 (in Polish, German) regarding personal matters and asking about the family in Poland

Hirsch: Max, Paula, Gretel and Kurt, 1940

Dr. Hoffmann (Danzig), 1926-34 (German)

Correspondence is in regard to a property settlement trial which was lost by the Goldman's-Tykociner's. Dr. Hoffmann was their lawyer. Polish material includes copies of letters written by Julia and Jacob Goldman, regarding the trial.

Box 6:

Immigrant Papers, 1930's - 1941

For Relatives:

List of relatives (no date)

Visa for Morris Goldman, 1920's

Application for Jerzy Goldman (George Glan), nephew of Helenka's 1936

For Joachim Neuman, second cousin, 1939

Federation of Polish Jews in America to George Glan

HIAS (Hebrew Sheltering and Immigrant Aid Society of America)

National Refugee Service (Chaim Efraim)

Affidavits for Henryk and Ludwika Feldman (Helenka's sister and brother-in law Maurycy Goldman and Maria (Helenka's brother)

George Glan for his parents Jakob and Jetta Goldman (brother to Helenka and sister of Joseph T. Tykociner)

American Consulate, Berlin

Dr. Ernst Israelski (cousin of Helenka or Joseph T. Tykociner),1937-1939

National Coordinating Committee for Aid to Refugees and Emigrants Coming from Germany (ARECG)

Raymond H. Geist, American Consul, Berlin

Moritz and Lotta Jacobsohn (Jacobson), 1934-1967

Lotte and Moritz Jacobsohn (German - English)

Cousin - Else Paradies (German) Moritz is her uncle

Cousins - Margot Paradies (English), Ruth Paradies (English)

To American Consul (Warsaw), October 20, 1958

To Dr. A. L. Sachar, Director, Hillel, Champaign

M. F. Baer, Refugee Aid, B'nai B'rith, Washington, D. C.

Cousin, Hermann Jacobsohn

Cousin, Kurt and Ruth Jacobsohn Kaufmann about immigrants and refugee problems in the late 1930's and 1940's

To be found in the back of the folder, correspondence (1948-1942) with:

Harry Jacobsohn

George Jacobsohn (German)

Joachim Neuman (German)

Bruno Minz

Alfred Lewin (German)

Correspondence, Francis and Ludwik Kowalski; Antony Poczynski; Julia and Jacob (Samuel Jacob) Goldman, 1931-1936 (in Polish) 12/16/31 - Ludwik and Francis, their son Joseph has problems with his eyes; mentions the plenipotencya. 2/3/32 - Lodz, family matters, Ludwik doesn't have a job. 2/11/32 - Lodz, Ludwik, family matters. 1/8/32 - Answer from Joseph Tykociner, about the plenipotencya, about difficult financial situation at the University of Illinois. 12/28/31 - from J. T. Tykociner. 2/29/32 - Details questions about inheritance problems. 5/17/32 - from Helenka about the family. 6/18/32 - from J. T. Tykociner about the difficult economic situation in America; Ludwik found a job. 9/18/32 - from Ludwik, Joseph went to Vienna for eye surgery. 4/31/32 - a letter in German from (?). 3/22/32 - Ludwik, family problems. 4/4/32 - from Julia and Ludwik, Julia's mother is ill. 10/25/32 - from Francis, general. 11/29/32 - from Ludwik, Joseph left the hospital in Vienna. 4/11/32 - from Ludwik, about his arrangements with all the properties of the parents. 1/6/33 - Lodz, from Ludwik, Joseph is already at home.

12/30/33 - general matters. 7/31/32 - from Porczynski, this man is often mentioned in the matter of selling a house in Bydgoszcz. 1/4/34 - general Ludwik in order to finish the house matter. 10/10/34, 2/4/35 - Correspondence between Ludwik and Porczynski about the house. 1/14/34 - From Ludwik, about all the arrangements in the property of their father and mother. 6/19/34 - From Francis Kowalski and her son Joseph, wedding greetings. 6/6/34-From Francis, general matters. 7/15/34 - From Ludwik describing all the problems that they had with the property after the death of the father and mother of Helenka Tykociner. 8/10/34 - From Julia, about the death of Helenka's father. 9/9/34 - From Ludwik; he asks Tykociner's advice in the Porczynski matter. 9/26/34 - From J. Tykociner answering the letter of 99/34. 9/18/35 - Ludwik, about family matters. 6/22/38 - Ludwik. 11/5/35-10/22/36 - about general matters and financial situation.

Benek, Ludwig and Francis (Tykociner) Kowalski, 1932-1938

Benek Kowalski, 8/2/1934 - about the family and his job and profession (Warsaw) January 28, 1935 to Tykociner (Kowalski's uncle and aunt) - He wants to open a private radio workshop; problems in getting radio parts from United States, the cheaper source; negative answer from RCA-Victor Company about sending the description of its radio-models (because of other contracts); shows interest in television; asks about details in their production in the U.S.; asks to send him RCA publications about specific radio types and general indications about television literature; asks for Professor J. Tykociner publications; Jerzy in Paris

Kowalski to Tykociner, April 12, 1937, Lodz, "family letter" (from Joseph, Ludwik (the father), Francis (the mother), and Benek) - problems in publications of Joseph's

scientific paper.

4/15/32 - Ludwik to Moses (Tyler) Tykociner, about financial problems; Francis to Moses, about finding out if a Jacob Hoffmann, a wealthy diamond merchant who had lived in Africa died and left a will, is related to Francis' grandmother.

Ludka Kowalski to Professor Tykociner, Lodz, Cegielmiana 55, June 8, 1937- Problems in finding jobs (Polish)

Warsaw 19, June 37, Benek Kowalski to Professor Tykociner - about Professor Tykociner scientific paper about "Sposob oblicrania krysztalow kwaria olla nizery and agstotliwosu", more questions about this subject; about Joseph's paper (Polish)

Warsaw 12, June 37, Benek Kowalski to Professor Tykociner, asks for book about radioconstructions (Polish)
Difficulties in getting job in Polish Electric Company and others

because of being Jewish

Lodz, April 10, 1938, Benek Kowalski about sending more materials to Tykociner (Polish)

Warsaw II. IX 37, Benek Kowalski to Tykociner - about his plans to go to U. S. (Polish) Lodz 23 XI, 1937 - Family letter (the mother, the father, and Benek Kowalski) to Tykociner - about Benek Kowalski's journey to the U. S. in order to study and

acquaint himself with scientific research in the U. S. A. (Polish)

Benek Kowalski, April 15, 1938, Cleveland, Ohio - to Tykociner, about his meetings with representatives from various electronic companies (Polish)

Boston, Massachusetts, 19. IV, 38 about Benek Kowalski's visit to the General Radio Corporation (Polish)

April 15, 1938, Cleveland, Ohio (two letters) about Benek's meeting with the Brush Development Company about licenses (Polish)

Two chronological post cards from Benek Kowalski to Mr. and Mrs. Tykociner from April 18 and 20, 1938 in U. S. A. (Polish)

April 26, 1938, Benek Kowalski to Professor Tykociner - about his visit to the Polaroid Company (Boston), General Radio (Boston), Professor Cady (Middletown Connecticut) The letter is full of technical details about crystals, holders, oscillators, etc, (Polish)

April 30, 1938, Benek Kowalski to J. Tykociner - visited in Premier Crystal, about orders from different companies for his company in Poland. (Polish)

Benek Kowalski to Tykociner, Washington, from the ship going back to Poland. (Polish)

Ben and Luba Kowalski, 1945-1948, Joseph T. Tykociner's cousin

Correspondence on immigration

American Jewish Congress

American Joint Distribution Committee

Affidavits

Joseph Kowalski, 1935-1937 (Polish)

(Blind brother of Benek Kowalski) Letter from Lodz, mainly about his thesis, "Logotype"

Jakob and Anna Kunz and their children, 1927-1968

David and Margaret Kunz Rhue

John and Annamarie Kunz Honnold

Box 7: Correspondence, 1923-1969

Alfred Lewis, 1939-1942

Hildegard and Zalka Minz, 1939-1946

Charles Bead, Letters

Bruno and Lotte Minz, Letters

Affidavits for Bruno Minz

Florence and Milward Pick, 1923-1959

Milward Pick, August 12, 1923 (on inventions and their financing) Joseph

Tykociner to Picks, March 30, 1923, material about sound on film

Photographs, Florence Pick, Joseph T. Tykociner, 1954

Eleanor (son Steven) and Milward Pick, 1954

October 22, 1959 - Florence recollects Tykociner's discussion about when he was in London, c. 1901

Florence and Milward Pick, 1961-1969

Letter from Tykociner contains notes on zetetics

Heinz Rautenberg and Zalka Jacobson Rautenberg (Helenka's cousins)

Hebrew Sheltering and Immigrant Aid Society, 1934-1943

Heinz (Henry) Rautenberg

Zalka Jacobson Rautenberg (German)

American Consul General, Sydney, Australia

Affidavits for Harry Jacobson

Gertrude Shareokf, 1941 regarding parcels to Poland

Mrs. Tykociner's car accident, insurance claim, July - November, 1933

Correspondence between Helenka and Joseph T. Tykociner, 1938; 1940 (Polish) 6/27/40 - Joseph to Helenka that the situation in Europe is discussed privately, never openly. 6/30/40 - Joseph writes that he discovered a new photoelectrical effect and is checking in the library to see if someone else has already discovered it; if not, he wants to start a

series of experiments on this effect.

Maurice (Moses Tyler) Tykociner, 1930-1934 (in Polish)

11/15/30 - from J. T.

T.

Tykociner explaining the problems that the family has after the death of his father: He

didn't leave any money and left large unpaid loans. He will pay Moses and his share while Jacob Goldman and Ludwik Kowalski will pay the remainder. 7/12/30 - Moses mentions the illness of their father. 9/11/30 - Moses writes about their father's death. Remainder of letters is about Moses' poor financial situation while in New York and his inability to find a job.

Minna and Jacob David Tykociner, 1924-1930 (in Polish)

7/16/24 - about their

financial situation. 5/15/30 - from Jacob Tykociner about his social work. 4/30/30 - from Jacob about his work. 4/8/30 - from Jacob about his voluntary work among different Jewish organizations, especially the Nursery Home for Old People.

Julius Waller, 1937-38, Memel (German)

Frau Westphalen, 1930-1941 (German)

Director Reutersward, Stockholm, 1934

Edward S. Witowski, 1941-1942

Travel bureau that handled food parcels sent to Poland to: Ludwika Feldman

Marietta Goldman

Arthur Kowalski

Franciszka Kowalski

Rosa and Edna Wolff, 1939-1941

Rosa, Hilde, Elli

Bruno Harry Wolff, 1939=1941 (German)

Dominican Republic Settlement Association, Inc.

Dominican Republic

Frau Spies (German)

<u>Box 8</u>:

Technical Letters, 1929-1934

National Research Council, Committee on

Electrical Insulation, Circular of Information, February, 1929

Caio Graecho de Souza Gaissler, Engineer, May 22, 1930

Newton Gains, Head of Physics Department Texas Christian University March 20, 1931

W. L. Phillips, January 28, 1933

To W. L. Phillips, February 14, 1933

W. L. Phillips, February 23, 1933

Copy of President Willard's address on "The Laboratory in Undergraduate Engineering Education," University of Iowa, December 7, 1934

Technical Letters, 1935-1936

Assistant to the President, MIT, March 7, 1935

Comment on an invention, see attachment to Mr. Brummett's letter, October 10, 1935

Ralph W. Armstrong, January 13, 1936

To Stephen Timoshenko, University of Michigan, March 14, 1936

Tank, Zurich, Switzerland, June 25, 1936

W. W. Brooks, September 20, 1936

Professor Cady, Wesleyan University, Connecticut, October 1, 1936, October 3, 1936, November 2, 1936, November 10, 1936

Technical Letters, 1937-1938

To Mr. John Miller, Western Electrical Instrument Corporation, March 3, 1937, March 8, 15, and 18, 1937

Professor Cady, March 26, 1937, May 11, 1937

Vice President and Chief Physicist - Dr. Jacobsohn, Gaertner Scientific Corporation, June 21, 1937

Dr. Paul Fox, Laird Community House, Chicago, July 21, 1937

To Dr. Fox, July 14, 1937

W. W. Brooks, former student, G. E., March 5, 1938

To J. Kraehenbuehl, Electrical Engineering, University of Illinois, August 27, 1938; August 30, 1938

P. Gerald Kruger, Acting Head of Physics Department, University of Illinois, September 21, 1938

To Samuel Wein, 2054 Harrison, New York City

Technical Letters, 1939

To Dr. Joel Stebbins, February 5, 1939

Dr. Jacobsohn, June 10, 1939 through June 29, 1939

Grace N. Oliver, Editor, Illinois State Academy of Science, August 9, 1939

To Kraehenbuehl, October 2, 1939

Professor Kraehenbuehl, October 23, 1939

Technical Letters, 1940

Kraehenbuehl, Cleveland, April 22, 1940

To Professor Kruger, Physics Department, June 15, 1940

(Gaertner) S. Jacobsohn, September 12, 1940

To National Research Council, September 28, 1940

National Bureau of Standards, October 8, 1940

M.L. Enger, Dean and Director, University of Illinois College of Engineering, October 26, 1940

To Dean Enger, November 2, 1940

Enger, November 5, 1940

Form - "Considerations for Possible Deferment of Men in Science", American Council on Education, December 7, 1940

Technical Letters, January - July, 1941

Form on Patents, A. C. Willard, President, University of Illinois, January 10, 1941

To Dr. E. A. Lederer, RCA, January 21, 1941

Dr. Lederer, January 31, 1941

Helen Jupnik, Physics Department, Bryn Mawr, February 5, 1941

To V.K. Zworykin, March 19, 1941

George Glan (cousin) on technical matters, March 25, 1941

Samuel Wein, April 6, 1941

S. H. Benjamin, April 9, 1941

To Samuel Wein, April 4, 1941

To Dean D. J. Davis - School of Medicine, University of Illinois, Chicago, May 4, 1941

To S. H. Benjamin, May r, 1941

S. H. Benjamin, New York City College, May 12, 1941

H. A. McIlvaine, President, Continental Electric Company, June 4, 1941

S. H. Benjamin, New York City College, May 12, 1941

H. A. McIlvaine, President, Continental Electric Company, June 4, 1941

S. H. Benjamin, June 5, 1941

To S. H. Benjamin, June 16, 1941

S. H. Benjamin, June 20, 1941

Form letter on donation for Dr. David Kinley's 80th birthday, June 20, 1941

President H. A. McIlvaine, June 26, 1941

To S. H. Benjamin, July 8, 1941

Sidney H. Benjamin, July 14, 1941 To Mr. Leo Lentzen

Box 9:

Technical Letters, August - December, 1941

Director General, The Federated Nations of the World, September 12, 1941

To Helen Jupnik, September 19 and August 29, 1941

Leo J. Lentzen, September 23, 1941

To Mr. Gilbert B. Bliss, November 12, 1941

Technical Letters, 1942

To Mr. J. L. Bisesi, Waugh Laboratories, New York City, February 25, 1942

Reply, Bisesi, March 4, 1942

Lederer, March 19, 1942

Technical Letters, 1942, continued

To Dr. E. A. Lederer, RCA, March 16, 1942

Correspondence with Dr. Bertram Wellman, Tufts College, Research Laboratory of Senior of Psychology, October 20, 1942

To Professor W. L. Everitt, Ohio State University, December 2, 1942

Technical Letters, 1943

Dr. Bertram Wellman, January 20, 1943

Bob Waggener, February 3, 1943

To Dr. Albert F. Murray, National Defense

Dean R. D. Carmichael, March 3, 1943

To Mr. John H. y

Pilkington, Consultant to the Chairman, NDRC, March 4, 1943

To Dr. E. A. Lederer, RCA, March 12, 1943

A. James Ebel, Chief Engineer, Radio Station WILL, April 2, 1943

Faculty Bulletin on War Activities of University of Illinois, April 10 and May 25, 1943

To U. S. Senator from Illinois, Scott W. Lucas, May 28, 1943

U. S. Senator Scott W. Lucas, June 5, 1943

Correspondence with D. J. Morris, Physics Department, Tulane University, June 22, 1943 Letter of Recommendation for Louis R. Bloom to Office of Naval Offices Procurement, September 14, 1943

L.R. Bloom to Ellery Paine, for release from staff position

Report of Committee on New Building for Department of Electrical Engineering, October 27, 1943

Paine to Lt. Col. McIntyre, Headquarters, Army Service Forces, War Department, Washington, D.C., November 30, 1943

Faculty Bulletin on War Activities of University of Illinois, December 6, 1943 Technical Letters, 1944

To John C. Chiddin, Editor, The Science Teacher, February 7, 1944

Correspondence with Dr. Alfred Goldsmith, Editor, The Institute of Radio Engineers, February 28, 1944

News Clipping on Joseph T. Tykociner and Magnetron Oscillator, March 1944

Correspondence with W.A. Laning, March 3, 1944

Professor Glenn Kaehler, March 29, 1944

Emil Amelatti, Department of Mathematics, Villanova College, April 3, 1944

To Amelatti, Department of Mathematics, Villanova College, April 3, 1944

To Amelatti, April 17, 1944

Letter of Recommendation for Joseph T. Tykociner - Professor Paine, April 27, 1944 Correspondence, Association Editor, Helen M. State, IRE, April 28, 1944

To Dr. Alexander B. Bereskin, Electrical Engineering, University of Cincinnati, May 29, 1944

Dr. Bereskin, May 31, 1944

To Dr. Goldsmith, Editor, IRE, c. June, 1944

Diagram and Photos of equipment used in the article "Magnetron Oscillator for Instruction and Research, Microwave Techniques," by Tykociner and Bloom, June 6, 1944

Professor Gregory Timoshenko, University of Connecticut, June 9, 1944

Copy of Proposed Post-War Off-Campus Program in Electrical Engineering, June 19, 1944

F. Ellis Johnson, Dean, College of Engineering, University of Wisconsin, June 21, 1944 James Wilson, September 11, 1944

To James Wilson, September 28, 1944

Answer to Questionnaire of Educational Plans of University of Illinois Veterans, August, 1944

Technical Letters, 1945 - February, 1946

To Dr. Otto Stern, on award of the Nobel Prize, Molecular Physics, Carnegie Institute of Technology, January 4, 1945

Dr. Otto Stern, reply, January 23, 1945

Correspondence Major James H. Stewart, February 20, 1945

Continued Correspondence with Laning, March 17, 1945

To Dr. Yntema Fansteel Metallurgical Corporation, Chicago, March 28, 1945

Correspondence H.H. Stewart, Queen's University, Kingston, Ontario, May 9, 1945

Correspondence on Patents #527, 353 and 527, 484, December 4, 1945

Correspondence on Patents, February 15 - February 26, 1946

Box 10: Photographs

Tykociner, Friends and Relatives, 1920's - 1930's

Tykociner - Trip to Europe, 1927-1928

Cross Reference Sheets for Plate Glass Negatives Taken in 1927-1928

Tykociner, c. 1920-1969

Including Bloom, Waggener, Mrs. Tykociner, Everitt, Dean M. L. Enger, Ellery Paine, V. K. Zworykin

Photo - Society of Motion Picture Engineers, 1923

Laboratories and Equipment - Antennae Models c. 1925

Laboratories and Equipment, 1926-c. 1939

Laboratories and Equipment - Phototubes, 1940

Laboratories and Equipment, 1941-54, including magnetron research

Striation Research, 1954

Photos, unidentifiable

25 Jahre Telfunken, 1903-28, Telefunken Gesellschaft: Berlin, 1928, 328 pp. 218 JTT Engineer, 1904-17

<u>Box 11</u>: Newspaper File, 1922-1969 and Biographical Material Collected by Joseph T. Tykociner

Map of Poland

A. Biographical Clippings, 1922-1969, J. T. Tykociner and wife

Vladimir K. Zworykin

Mr. S. M. Raphaelson, "Jazz Singer"

Ellery Paine

Morris L. Enger

William L. Everitt

Walter D. Rose

On Research, Sound on film, et al.

- B. Sample Clippings on Cultural Events
- C. Sample Clippings on Economics
- D. Sample Clippings on Poland and WW II
- E. Polish Newspaper Clippings, 1933-1935
- F. Sample Clipping on Refugees, Anti-Semitism, Palestine
- G. Sample Clippings on Politics, United Nations, Univ. of Illinois affairs, Old-Age Housing
- H. Clippings on Science reports
- I. Tragedia Zydow (Wycinki) Re: Refugees; Anti-Semitism; (English and Polish)
- J. Research Centers and Art
- K. Statistics of Budgets for Research and Manpower
- L. Education and Social Ethics
- M. Biographical Material, Journal articles, 1922-1969

<u>Box 12</u>: Autobiographical Data, 1877-1967; Publications, 1906-1945 Bound Volume of all Univ. of Illinois Published bulletins written by Joseph T. Tykociner

Autobiographical Data - 1967

Patent list, c. 1940; Scientific Career, c. 1950's; Researches, 1921-1961; List of publications, 1967

Recollections

"Florence's notes from Uncle's (Tykociner) dictation, 7/17/57

"Recollection", September 1957

"Personal Chronology; "Some Important Dates in My Life"; "My First Experiments and Discoveries"; "The Young Galileo"; "Can Sound by Photographed?"; "Shall a System of Sound Motion Pictures Be Developed?"; "Consciousness of Self" February 1960.

Notes

Diary, March 3-6, 1959; September-December 1962, January 1, 1963 (incomplete)

"Notes (Preliminary) On Old Age and Its Problems, July 1967.

List of Publications, 1944, c. 1928

Publications, 1906-1945, 1900-1922; Transactions of the Society of Motion Picture Engineers, 1923; publications 1923-25, 1926-29, 1930-39, 1940-45

(Personal Data and List of Publications attached to the end of this finding aid)

Box 13: Savings Account, 1923-28; Univ. of Illinois Employment Contracts, 1921-1967; Income Tax, 1938-54

Financial Records, Poland, 1918-20; New York, 1920; Pittsburgh, 1920

Financial Records, 1923-31; 1939; 1941

Savings Account, 1923-28; 1966; Stock, 1946

New Rooms, Household Finance, 1925-44

Office Furniture, c. 1963

University of Illinois Employment Contracts, 1921-1967 Income Tax, 1938-1959

Box 14:

Diary Material

Autobiography: First Visit to U. S., 1896-1897; Notes on "life in Poland, 1886-1890; "Note on Brothers Karamazov; Teachers and classmates, 1888-1891; First impression of Illinois, 1921; Impressions of parents reminiscences of Polish Insurrection; Calendar, September, 1921 - Nov. 1921; 1922; Apparatus loaned, 1922; Calendar, c. 1930's; Calendar, Sept. -Dec., 1937; Vacation Diary, 1942; Diary on Bursitis, 1937-43; Trip to West Coast, 1946; List of Vacations, 1947-52; Diary, Lake Geneva, 1948; Poem, Copernicus; Calendar, c. 1948; Item, 1950; Items, 1954; Diary, January, 1954; Berkeley California visit, 1954; Note, 1959: Years spent living in Poland, Germany, England, Russia, 1961; Calendars, 1962; Calls to be made, 1967

Diary and calendar: Research and Personal; 1926-1935

Research Expenditures on Equipment, 1934-1945

Calendar of Events and Photoelectric Research, January, 1938 - December 1940, January, 1941 -August, 1942

Calendar of Events and Effect of Phase Differences on Wave Forms of Superimposed Current, October, 1940 - January, 1944

Microwave Investigation, January, 1942 - August, 1944

Sketching and Diagrams, March, 1945 - October, 1946

Orders: Aircraft Radio Labs: 1945-46 (Contracts #223 and 14528)

Orders: Watson Lab, 1946 (Contract #126)

Calendar of Events - Research and Personal Diaries, 1946-1955 Box 15:

Distribution of Tasks, 1946-1947

Calendar of Events - Millimeter Wave Research, Brief notes of appointments, social engagements and (Lectures to attend), June, 1946 - March, 1948; March - August, 1948 Calendar on Research, 1949

Calendar of Events and Research, 1946-1947

Diary, 1948-1958

Calendar of Events, 1949-1955

Zetetics, 1950-1952

Calendar of Events, 1956-1969; Classification Lists Box 16:

Calendar of Events, 1956-1966

Diary and Notes taken regarding Zetetics, 1967

Calendar of Events and Telephone Numbers, 1968

Miscellaneous dates on Zetetics meeting, 1968

Diary of Zetetics Events, 1963-1969

Classification Lists made-up by Tykociner

Index of folders - Typed (main research projects follows this index)
Index of folders - Written

Classification of Card Notes

Classification of Card Notes never found

Classification of Booklets

List of Folders

Box 17:

3 x 5 Bibliography cards arranged chronologically in accordance with <u>Classification of Card Notes</u> A-J (See box 15) Some groups of cards are missing.

Bottom of Box - From (List A) 00 (unclassified) to (List D) 313 (Electrochemical Photo Cells) Top (List D) 314 (Photo Cells Amplification) to List 1) 79 (Kerr Effect) (Skip List H) Cards classified by subject content, but not according to classification list; unclassified; books to order; read; War and Peace; Science and Society; Planing; Technocracy; List of Sciences; Research and Investigation; Books Ordered; Books interested in; Books recommended; Books received (English Like); Books in...Library; Organization of Research and Invention; Books; general character; Books on Electricity; Books on Physics and Electricity; Books on Radio

Tykociner's private library collection (books, card system, notes and slides) on Zetetics and other topics (engineering) is in the Rare Book Room, Sandra Broadrick-Allen

Box 18:

3x5 Bibliography Cards classified by subject content but not according to classification list;
Books on mathematics; addresses of supply companies; Graduate students; unclassified
First experimental talking film, 1921-22. The film is a negative and the sound track will not play
on a modern projector. The film shows a picture of the new apparatus and gives a
description of its method of operation. Includes pictures of J. T. Tykociner, Jacob Kunz
(developer of the photo-electric cell connected with the new process), #B. Paine reading
aloud, and Manoah Leide Playing the violin. The film also shows pictures of the
soundtrack and how it is affected by sound such as speech, the ringing of a bell, and the
violin. This duplicate film was made in 1954 by the Motion Picture Society of America.

16mm film (200 feet) acquired from Arthur Wildhagen on December 10, 1970, which is a duplicate of a 16mm film held by the Motion Picture Service to match sound and images of Mrs. Tykociner and a violinist.

Videotape dubs of 16mm film: 1/2" Beta made 1984 and 3/4 U-matic made 1995 Audiotape recording (3" reel 7 1/2 IPS) of sound excerpts from Prof. Tykociner's 1921-22 sound-on-film recording.

2 negative prints (35mm) from original picture and sound track negative, sound on film, 1922 Nitrate negative (35mm) with soundtrack of Helenka ringing the bell, 1922

Small box containing: 35mm film clip of Helenka in first sound film, 1922 and microfilm of L'Invention, proceedings of Neuvième Semaine Internationale de Synthèse, Paris, 1938

Biographical Tape Recordings - May 3, 1965 interview by M.J. Brichford: Reel 1:

1-8 Identification of Tape

9-76 Development of Zetetics. Quotes from <u>Research as a Science</u>: <u>Zetetics</u> (1959). Experience in scientific research in 1920s: 1) lack of funds; 2) skepticism; 3) lack of space.

- 1 Photographic reproduction of sound.
- 2 Investigation of electromagnetic waves.
- 3 Piezoelectricity.

Times were unfavorable for University research. Industrial research was considered as the primary function of the College of Engineering.

In 1926, I began to wonder what if none of the problems that I was interested in fits into this scheme of administrative circumstances so irrelevant to research. I sought a rational way of conducting research. I became interested in a scheme for all sciences that would disclose gaps in our knowledge. "The beauty of it appeared in its universality." It required neither space nor money, but it was not suitable for the Engineering Experiment Station.

77-136 First Phases of the Development of Zetetics.

1928 - Physics Colloquium lecture.

1931 - paper on classification of research problems in dielectric.

My first three observations were:

- 1 group investigation.
- 2 decreasing time interval between discoveries and applications of brought an erratic "chain reaction" development of scientific research.
- 3 chance determines the usual selection of research problems. "Shall we be slaves of chance?"

I suggested "a method of generating problems." Example of the periodic chart, which predicted the existence of elements.

Development of Zetetics beyond the 1959 book is covered in two pamphlets:

Evolution, History and Zetetics; Zetetics and Areas of Knowledge (1964)

Zetetics is treated as a new area of systematized knowledge.

- Betatron and Kerst. kerst was a physicist who was interested in engineering problems. He represented a necessary combination of two areas of knowledge. Interconnected nature of research.
- 180-197 Discussion of tape recording procedure.
- 198-219 What is the importance of zetetics?

Definition of zetetics - "zetetics is the totality of recorded systematized knowledge related to such methods of research, mental processes. . . ."

What zetetics can do:

- 1 collect and systematize data.
- 2 improve methods of inquiry to disclose gaps in knowledge.
- 3 suggest means of stimulating creative ideas.
- 4 supply a basis of education for research.
- 5 develop a discipline for the discovery of new knowledge.
- Zetetics is more than a science, it is an area of knowledge. It has grown into 8 main subdivisions.
 - 1 Zetegeny
 - 2 Taxilogy
 - 3 Problematology
 - 4 Zetesis
 - 5 General methodology
 - 6 Education for zetesis
 - 7 Study of conditions and incentives
 - 8 Research centers
- 260-337 Purposes of Zetetics
 - 1 Unification of human knowledge

2 - means of studying gaps in human knowledge 3 - produce catalogs of human knowledge by use of computers 4 - provide a means of orientation for one's life work. Examples of gaps in human knowledge: 1 - the science of peace - pacifics. 2 - zetetic education 3 - social ethics - religion and unification. Supernaturalism has not proved a valid basis for peace. 338-354 History of science demonstrates that significant discoveries have resulted from the study of interrelationships. A main objective of zetetics is retrieval of human knowledge. 355-374 375-381 Discussion of tape recording procedure. 382-419 Broader concept of science - recorded systematized knowledge, including works of art and physics. Specialists' "islands of knowledge" should be unified. Barriers must be destroyed between humanists and scientists. 420-459 Institute of Zetetics has been proposed and reactions received. "My ultimate goal is to form a center for the development and study of zetetics." It should counteract the tendency towards specialization. It will promote an understanding of areas of knowledge. 460-479 10% of researchers should be engaged in synthesis. They will be zetetists. Pure and basic research. 480-498 Scientific discoveries are made by studying two areas not previously connected. (tape received from Mrs. Jennifer Johnson, WILL, on January 18, 1968. She <u>Reel 2</u>: stated journalism professor who taught course and student who interviewed Mr. Tykociner agreed to transfer the tape to the University Archives). 5-6 March 9, 1967 interview of J. T. Tykociner by student Wayne Kaplin at 7.5 IPS. 7-19 Boyhood interest in sound recording. Dissatisfaction with needle and cylinder. 20-26 Decided sound must be recorded photographically. 27-31 Decided to leave Poland. 32-39 Difficulty with requirement for practical experience. Came to U. S. 40-63 In 1896-97, film was not known. 64-94 Came to New York in a time of depression. Edison's Bioscope displayed in a vacant store. Moving picture, but no sound. 95-135 Reluctance to support this "fantastic" idea. Proposed to photograph the modulation of light. Physicists did not understand. I began experimentation. Signals were too weak. I needed a good amplifier. 136-149 After 1 year, 4 months, I left U. S. for Germany. Graduated in 1901 or 1902. Became interested in radio.

| 150-184 | Found no jobs in Poland and Germany. Went to London, England and joined the Marconi Company. Research engineer for 2 years. |
|---------|--|
| 185-193 | Received an offer from the German Telefunken Company for research work in radio telegraphy. |
| 194-229 | Russo-Japanese war broke out and was the only engineer who knew Russian and radio. Stayed for 15 years, three revolutions and World War I. I then went to Poland and to the United States in 1920. |
| 230-251 | Decided to work on sound pictures. One year with Westinghouse in Pittsburgh, but I could not convince Mr. Skinner, laboratory director, that there was anything in sound pictures. |
| 252-303 | Came to University of Illinois as a research professor in September, 1921. I was disappointed with research plans. A committee was appointed to determine if the research was possible. I had to convince them with an experiment. Worked 10 months in the Physics Department. |
| 304-372 | First public demonstration took place on June 9, 1922. In April, 1922, Board of Trustees, President Abbott, President Kinley and Vice-President White came to the laboratory. They liked the demonstration and encouraged me. At a meeting of electrical and radio engineers on June 22, 1922, I demonstrated the sound on film. |
| 373-421 | Problem of lack of money and help for the research. Needed glass blowers. Had to borrow form other departments - Chemistry, Agriculture, Signal Corps. Delays in getting equipment. Physics mechanism helped me. |
| 422-429 | I had no assistants, except at demonstrations. |
| 430-478 | Demonstration made an impression. Newspapers published feature stories. <u>New York World Telegram</u> article that I wrote. |
| 479-510 | Public reaction. Josef Wright, public information director, had clippings from 700 newspapers. People came for individual demonstrations. |
| 511-578 | Specialists resisted innovations. Hollywood man said costs were high. Stars don't speak very well. Poor diction. "They drink too much." |
| 579-591 | A psychologist said it was based on illusions of both sound and the eye. |
| 592-659 | Sound and televise - Eastman Kodak representative said "he wouldn't give a dime for it." Our physics professor Watson asked why and the representative said "the public doesn't want it." |
| 660-697 | First sound on film production. My wife, bell and a question. |
| 698-750 | First commercial film came 6 or 7 years later. Western Electric produced film and separate records. e. g. "The Jazz Singer." |
| 751-768 | Fox, General Electric and Bell. |
| 769-832 | Other inventions. Most important is zetetics - the new science of research on which I have worked for 39 years. We have a lecture course, published three books. Great promise: the knowledge of how innovations are made. |

Personal Tape Recordings, ca. 1952:

<u>Reel 1, Side 2</u>:

| 1 - | Joseph Tykociner asks Mr. Adams what he is studying |
|-------|--|
| 7-23 | Mr. Adams is taking Electronics, is satisfied with courses |
| 24-83 | Classical music |
| 84-90 | Background |
| 91-96 | Classical Music |

Background and the discussion in Polish, Helenka and Joseph and Mr. Adams 140-814 Classical Music and end of tape

<u>Reel 1, Side 1</u>:

1-814 Classical Music continued

Reel 2, Side 2:

255-281 282-288

298-318

| 1-4 | Adjustment | |
|-----------------------------|--|--|
| 5-25 | Introductory statement by John Honnold describing recording session with Mr. | |
| | and Mrs. J. T. Tykociner (Uncle Joseph and Aunt Helenka), Mrs. Jakob | |
| | Kunz and five members of the Honnold family, June 26, 1952, (Honnold's thirteenth wedding anniversary) | |
| 26-56 | Heidi Honnold | |
| 57-82 | Carol Honnold | |
| 83-98 | Eddie - 1 - background - noise Helenka and Joseph | |
| 99-118 | Mrs. Honnold (Margaret Kunz Honnold) | |
| 119-133 | John Honnold sings "Let Me Call You Sweetheart" | |
| 134-136 | Background Music | |
| 138-143 | John Honnold introduces Mrs. Kunz | |
| 144-153 | Mrs. Kunz thanks Honnolds and Tykociners | |
| 154-156 | John Honnold introduces Helenka Tykociner | |
| 157-172 | Helenka Tykociner - comments | |
| 173-176 | J. Honnold introduces Joseph Tykociner | |
| 177-19 5 95 | Joseph Tykociner expresses thanks and best wishes, congratulates John on his full | |
| 1//-19393 | professorship at University of Pennsylvania - goodby | |
| At Tykociner House, Urbana: | | |
| | | |
| 200-207 | Joseph Tykociner says hello to Richard, Ellen and Marian Parmelee, June, 1952 | |
| 208-215 | Richard Parmelee - on their way to Colorado | |
| 216-129 | Ellen Parmelee | |
| 2210-228 | Marian Parmelee | |
| 229-230 | Joseph - thank you | |
| 230-243 | Helenka - says goodby, asks Marian to sing a song | |
| 244-251 | Marian sings, "Be kind to your web footed friends" | |
| 252-254 | Helenka asks Richard and Ellen to sing a song | |
| 255 281 | Dishard and Ellan sing "On ton of 'Ol Smoleav" | |

Richard and Ellen sing, "On top of 'Ol Smokey" July 15, 1952 - Helenka says goodby

"On top of 'Ol Smokey" again

| 325-358 | Ed Scott introduces segment: (105 W. Michigan) Joseph and Helenka paid a visit. (Harriet and Johnny there), August 14, 1952. Scott going to NYU on sabbatical year, discusses plans |
|--|---|
| 359-381 382-399 400-411 | Johnny Harriet Johnny sings, "I'll Be Working on the Railway" |
| Box 19: | |
| Sound Record "The S | ing Tapes cience of Research," introduction by Kevin Wheeler, October 8, 1956 (Transcript in Box 40, File C.12) |
| Reel #/. Reel #/. | |
| Reel #: | Side 2, March 22, 1966 5, Side 1, (Track A), March 24, 1966 Side 2, March 29, 1966 Side 1, (Track B), March 31, 1966 Side 2, April 5, 1966 |
| Reel #6 | 5, Side 1, (Track A), April 7, 1966 Side 2, April 19, 1966 Side 1, (Track B), April 26, 1966 Side 2, May 3, 1966 |
| | 7, Side 1 (Track A), May 5, 1966 Side 2, May 10, 1966 Side 1 (Track B), May 12, 1966 Side 2, May 17, 1966 8, Side 1 (Track A), May 19, 1966 Side 2, May 24, 1966 |
| Box 20: | Sound on Film |
| How I Made the Research, 192 Experimental Investigation I First Lecture - Second Lecture | Recording and Photoelectric Reproduction of Sound," 1923 ne Invention, c. 1923 1-1922 Work - Talking Pictures, 1922-23 Report on Tykociner's Research, 1921 Sound on Film - June 6, 1922 ne - Sound on Film - June 9, 1922 ne with University of Illinois over continuation of project and patent rights, 1922, |

including David Kinley PresidentCorrespondence, 1921-1922

Eastman Kodak disinterested in findings, June 16, 1922

7/30/22 - Joseph Migdal, New York City, offers Tykociner the use of his garage and money for Tykociner's invention. Includes Tykociner's pencilled draft of his August 15, 1922 reply confirming and thanking Migdal for his generous offer and stating that if, at some future time, he has the chance/opportunity he will accept the offer (in Polish)

8/16/22 - Ludwig Silberstein invites Tykociner to visit his home in Rochester (in Polish) Mr. Dienner, Esq. on Lee DeForest's claim, August 25, 1922

Botsford, Charles, August 19, 1922 and film strip

Correspondence, 1923-1939

Eugene Augustis Lauste, August 8, 1932

Introduction to a talk on sound motion pictures, 1939

Correspondence, Society of Motion Picture Engineers, 1923-1924

Correspondence, Zworykin, de Mitkiewicz - Chavannes, 1923

J. T. Tykociner, "How I Made the Invention," c. 1923

Article and Correspondence, New York World

Newspaper Clippings regarding Sound on Film discoveries by: Tykociner, Lee DeForest,

Eugene Lauste, Lee A. Collins, C. A. Hoxie, 1922-1931

Correspondence with Bell Telephone Laboratories, 1929-1932

Electrical Show, 1926

Sound Picture History, 1962

Photographs, Sound on Film

Eastman Kodak Company, "Abridged Scientific Publication," 1919-1920

Bell Laboratories, "Synchronized Reproduction of Sound and Scene," 1928

Box 21:

- 1.1 <u>Photographic Recording and Photoelectric Reproduction of Sound</u>, 1922 given before a joint session of the Urbana Section of the American Institute of Electrical Engineers and the Electrical Engineering Society
- 2. Notes on Early Photoelectric Researches, 1922-1925
- 2.1 Photoelectric cells with hot filaments data from experimentations, 1922-23
- 2.2 Variation of capacity of photoelectric cells with illumination data from experimentations, 1922
- 2.3 A new photoelectric cell experimentations by J.T. Tykociner and Jakob Kunz including "A New Photoelectric Cell," reprint, 1924; Correspondence, Joseph Slepian, Westinghouse
- 2.4 "Control of Successive Ionization in a Photoelectric Cell," reprint, 1925, and "Production and Control of Successive Ionization by Collision in a Photoelectric Cell," J.T. Tykociner and Jacob Kunz, reprint, 1925
- 2.5 Application of cell (Photoelectric)
- 2.6 Discharges along a Photoelectric Surface Layer, 1923
- 2.7 Photoelectric Effect in a Thermionic Tube, 1923
- 2.8 Photoelectric Relays, 1925
- 2.9 Bibliography on Photoelectric Devices
- 2.10 Photoelectric Cell Notes, c. 1926, with, "Method of Measuring the Distribution of Magnetic Fields," given before <u>American Physical Society</u>, 1927
- 3.0 Notes on Antennae Models and Short Wave Researches, 1922-1926

- 3.1 Antennae Models and Short Wave Researches, November, 1922 March, 1923
- 3.2 Antennae Models and Short Wave Researches, April, 1923 June, 1923
- 3.3 Antennae Models and Short Wave Researches, July September, 1923, 3.4 September, 1923 December, 1923
- 3.5 January, 1924 April, 1924 including "Radio Laboratory for the Experimental Study of Radiation Phenomena and of Propagation of Electromagnetic Waves Over the Surface of the Earth," given before the AIEE and EE Society, Urbana, December, 1923; black and white photographs of the laboratory and equipment; "Shielded Oscillator for Herzian Waves," given before the American Physical Society, 1926
- 3.6 Antennae Models and Short Wave Researches, May, 1924 July, 1924
- 3.7 November, 1924 January, 1925
- 3.8 February, 1925 August, 1925
- 3.9 October, 1925 February, 1926
- 3.10 Index to each Antennae Model and Short Wave Research, 1922-1925
- 3.11 University of Illinois Bulletin, #147, <u>Investigation of Antennae by Means of Models</u>, May, 1925 (Original photos and diagram in the bulletin can be found in folder 3.5)
- 3.12 Bibliography on Short Electromagnetic Waves
- 3.13 Notes about manuscript on antenna models
- 4.0 Notes on short wave transmitters and methods of tuning, 1924-1927
- 4.1 Data on short wave transmitters, December, 1924 April, 1925
- 4.2 Diagrams, drawings and tables for Bulletin #161 and photo (black and white)
- 4.3 Manuscript copy #4 and original photos and blue-print diagrams for bulletin #161
- 4.4 Bulletin #161 Short Wave Transmitters and Methods of Tuning (February, 1927) (Tykociner and Lloyd P. Garner)
- 5.0 Notes on tuning of Oscillating circuits by Plate current variation, 1925- 29
- 5.1 Data on Plate current variations, October, 1925 July, 1926
- 5.2 January, 1927 July, 1927 including index of investigations on plate current variations and theory of plate current variations; black and white photos of equipment
- 5.3 Original curves, sketches and data sheets for bulletin #194 <u>Tuning of Oscillatory Circuits</u> for Plate Current Variations
- 5.4 Manuscript for bulletin #194 including letters among engineering department members pertaining to the manuscript
- 5.5 Checking of Damping Measurements
- 5.6 Bulletin #194, <u>Tuning of Oscillating Circuits by Plate Current Variations</u>, July, 1929, Tykociner and Ralph W. Armstrong
- 5.7 Intensity Curves of Photographic Sound Records, 1926, 1929 including correspondence: Dr. C.T. Elvey, Yerkes Observatory, University of Chicago, 1925; Professor H.M. Randall, Department of Physics, University of Michigan, 1926; "Applications of Microphotometer for the Analysis of Photographic Sound Records," <u>American Physical Society</u>, Washington, D.C., 1926
- 5.8 Abbreviation of Bulletin, #194
- 5.9 Miscellaneous Research on Plate Current Variations
- 6.0 Cable Investigations, 1926-1933
- 6.1 4 Black and White photos of arrangements for Cable Investigations (Cable Investigations #1)
- 6.2 Bibliography on testing of Dielectrics
- 6.3 Various reports on Cable Investigations
- 6.4 Tykociner's Reports and programs on cable investigations, 1927-1930, including black and white photos on cable research apparatus
- 6.5 Determination of Natural Frequency of Cables, October, 1926 March, 1927 6.6 Tests

- and X-Ray Pictures of Cable Samples, 1927
- 6.7 Cable Investigation #2, December, 1926 January, 1927
- 6.8 #3, December, 1926 August, 1927
- 6.9 Radio Frequency Cable Testing (Models), September, 1928 January, 1929
- 6.10 Cable Investigations, December, 1928 May, 1929
- 6.11 Fault localization with Standing waves, March, 1929 May, 1929
- 6.12 Supersonic cable testing
- 6.13 Receiver for cable testing (I = 500-3000m)
- 6.14 Cable Investigation by audio-frequencies
- 6.15 Testing cable #5, September, 1929 November, 1929
- 6.16 Cable calculations
- 6.17 Testing of paper samples; (manila and wood) Experiments of 1929
- 6.18 Artificial ionization source
- 6.19 Method of power factor measurements
- 6.20 Photographic study of ionization
- Notes of measurements on fault location, including black and white photo of equipment used
- 6.22 Location of sources of ionization in actual cable
- 6.23 Influence of pressure on ionization in cable
- 6.24 Cable testing by mechanical vibration, including letters asking for equipment
- 6.25 Short wave receiver, £= 14-115
- 6.26 Long wave receiver #4850 including catalogs from Silver Marshall (1928-29); Notes on amplifier investigation
- 6.27 Manuscript #1 for Cable Investigation Bulletin
- 6.28 Manuscript #2 for Cable Investigation Bulletin
- 6.29 Notes and original drawings for Cable Manuscript
- 6.30 Original tracings for cable bulletin including prints of oscillograms

Box 22:

- 6.31 Bulletin #259 (August 8, 1933) <u>Oscillations due to Ionization in Dielectrics and Methods of Their Detection and Measurement</u> (Tykociner, Hugh A. Brown and Ellery Burton Paine)
- 6.32 Bulletin #260 (August 5, 1933) <u>Investigation of Cable Ionization Characteristics with Discharge Detection Budge</u>
- 6.33 Manuscripts on Cable Investigations for the entire period, 1926-1930
- 6.34 Progress report on Methods of testing high voltage cables, August, 1929, including photos and blueprints
- 6.36 Summary of work done on Methods of testing high voltage cables, up to November, 1930, including photos and blueprints
- 6.37 Clarification of Cable Research Problems, 1929-1931
- 7.0 Notes of Grid and Plate Current Variations, 1928-1930
- 7.1 Investigation •Ig variation, October, 1929 November, 1929
- 7.2 Plate current variations (Driver), December, 1928 March, 1929
- 7.3 Plate current variations (Ig=o) May, 1929
- 7.4 Ip by periodic frequency variations, January December, 1930, including "Determination of Frequency and Damping of resonating Circuits" to be read at a meeting of the American Physical Society, Cleveland, December 30-31, 1930
- 7.5 Study of grid current variations, April, 1929
- 7.6 Plate current variations at audiofrequency and Harmonies, January February, 1929

7.7 (AIP) plate current variations by periodic frequency variations, September, 1929 - June, 1930

- 8.0 Notes on Various Early Investigations
- 8.1 Mercury Wavemeter 1/4 £ A Quarter Wavelength Meter for Ultra Radio Frequency Measurements Tykociner and L.P. Garner, April, 1925
- 8.2 Shielded U.H.F. Transmitter III, December, 1924 January, 1925
- 8.3 Receiver and Amplifier for U.H.F., May, 1926
- 8.4 Beverage Antenna for U.H.F., September, 1925 October, 1926
- 8.5 Television by Ray D. Kell (1st semester), 1926-1927
- 8.6 Short Wave Receiver (Calibrater, Diagram, August, 1929; Silver Marshall Data Sheet, August, 1928)
- 8.7 Receiver for 1m Wavelength, September December, 1932
- 8.8 Screen Grid R.F. Amplifier (Bayles Report, February, 1930)
- 8.9 Wavemeter for Short Waves, July, 1931
- 8.10 Tube for Ultra Short Waves including correspondence to G.E., Westinghouse, March July, 1931
- 8.11 Patentiometer for calibrating receivers, August, 1930
- 8.12 Mechanical Standing Waves by O.H. Kaminsky, February, 1931
- 8.13 Study of cores made of iron dust by Philips, 1932
- 8.14 Tuning with electrolytic iron cores wavemeter and dynation Oscillator, W.E. Philips and Tykociner, 1931-1932
- 8.15 Mechanical Model of Coupled circuit
- 8.16 Cathode Ray B and Pattern, 1935
- 8.17 Oscillographic Study of Coupled Circuit with photos, 1929
- 8.18 Optical Rotation; invertor for high voltage D. C., 1930
- 8.19 Oscillations due to R-Effect, 1931
- 8.20 UHF Oscillator, Calibrations, 1926-1928
- 9.0 Notes on Various Dielectric Investigations, 1929-1936
- 9.1 Notes on Emil Amelotti's Doctor thesis, 1939 (on oscillations travelling and standing waves in a cable)
- 9.2 Design of a new type corona discharge tube, (W. A. Laning, Jr.) October, 1930 April, 1931
- 9.3 Ionization and dielectric constant, January April, 1931
- 9.4 Ionization and dielectric constant, May, 1931
- 9.5 Shielding effect of aluminum covered rubber cables, October, 1934
- 9.6 Dielectric properties of porous materials (May, 1927 some written in German)
- 9.7 Reports on experiments with cables, crystals, thermocouples (R. B. Combe)
- 9.8 Kenstrons and corona discharge characteristics, April June, 1927
- 9.9 Determination of specific heat of dielectrics (Badger), May June, 1930
- 9.10 Bibliography on Dielectrics
- 9.11 Recent progress in Dielectric Research, National Research Council meeting, 1936
- 10.0 Notes on Determination of Natural frequency of oscillation of human body, 1930-1931
- 10.1 Natural period of human body (February June, 1931)
- 10.2 Frequency determination of human body, October, 1930 January, 1931
- 11.0 Measurement of current in electrodeless discharges by means of frequency variations, 1929-1932
- 11.1 Current measurements of electrodeless discharges, October, 1929 June, 1930
- 11.2 Current measurements of electrodeless discharges, October, 1930 September, 1931 including "Striations and Magnetic Effect in Electrodeless Discharges" read at the American Physical Society, Chicago, November, 1930

- 11.3 Current measurements of electrodeless discharges, March May, 1931
- Publication, <u>Philosophical Magazine</u>, May, 1932 including publication <u>Measurement of Current in Electrodeless Discharges by Means of Frequency Variation</u>, May, 1932 (Joseph T. Tykociner) and blueprints
- 11.5 Manuscript and drawing of electrodeless discharges
- 11.6 Electrodeless Discharge (Bibliography)
- 12.0 Notes on early corona investigations, 1929
- 12.1 Rectification of corona current and discharge (December, 1929; L. O. Hubbard and R. Okada)
- 12.2 Stroboscopic observation of alternating current corona discharge (November, 1929 L. O. Hubbard) (for E.E. 105)
- 12.3 Data on Oscillograms and amplifier (Tarplay)
- 13.0 Notes on Oscillations due to corona discharges on wires subjected to alternating potentials (Tarplay), 1930-1935
- 13.1 Improvements on corona bulletin
- 13.2 Theory of ionic and Barkhausen oscillations, June July, 1931
- 13.3 Manuscript on corona (1)
- 13.4 Manuscript on corona (2)
- 13.5 Corona Bulletin, Copy #4, blueprints and oscillograms
- 13.6 Corona Bulletin, Copy #5, blueprints and photos
- 13.7 Bulletin #278 Engineering Experiment Station, University of Illinois, September 17, 1935, Oscillations Due to Corona Discharges on Wire Subjected to Alternating Potentials, Joseph T. Tykociner, Raymond E. Tarplay, and Ellery B. Paine
- Oscillations in corona discharges, abstract papers read in 1931 including correspondence
 Raymond Tarplay, abstracts read before American Physical Society, Washington, 1931
 "Oscillation due to Corona Discharges on Wire," "Detection and Comparative measurement of ionization in dielectric by means of oscillations"
- 14.0 Notes on oscillations due to corona discharges on wires subjected to constant potentials (Woodruff and Laning), 1931-1938
- 14.1 Oscillations in D.C. Corona Discharge, July, 1931 July, 1932, including blueprints
- 14.2 Oscillations in D.C. Corona Discharge, October, 1934 December, 1934
- 14.3 1 Oscillations in D.C. Corona Discharge, September, 1935 June, 1936 including photographs of equipment, blueprints, oscillogram

- 14.4 "Oscillations Due to Corona Discharges" including photograph, blueprints, J.T. Tykociner and W.A. Laning, Fr. abstract of a paper given before the 7th annual conference of the Committee on Electrical Insulation, National Research Council, October, 1934
- 14.5 Paper read before National Research Council, 1934, "Interpretation of Oscillographic Records of A.C. Corona Oscillations," including correspondence with J.B. Whitehead, Chairman, Johns Hopkins University Committee on Electrical Insulation
- 14.6 Mechanism of Bead Discharge, October November, 1934
- 14.7 D.C. Corona Oscillations Material for New Bulletin, March, 1933 April, 1935, including blueprints
- 14.8 Drawings for Bulletin on D.C. Corona Oscillations
- 14.9 Tracings and blueprints for new bulletin on D.C. Corona Oscillations
- 14.10 William A. Laning, Instructor Gettysburg College, Correspondence with W.A. Laning including Ph.D. thesis, September, 1934 July, 1938
- 14.11 Notes on Laning's doctoral thesis
- 14.12 D.C. Corona Discharges; bibliography
- 14.13 D.C. Corona Oscillograms (Laning) photos of equipment
- 14.14 Laning's Corona Oscillograms taken June, 1938
- 14.15 Laning's last corona oscillations measurements checked by Bliss

Box 23:

- 15.1 Experiments on tabular oscillators (Woodruff), April August, 1932
- 16.0 Notes on the Study of Modulation
- 16.1 Bibliography on Modulation
- 16.2 Study of Modulation, March May, 1935
- 17.0 Notes on Magnetic Field Distribution, 1926-1927
- 17.1 Magnetic field measurements, September, 1926 July, 1927 including correspondence on experiment to Professor Karopetoff, Cornell University
- 17.2 Bismuth Method of aH/ox determination
- 18.0 Notes of Velocity Selector, paper delivered before the Physics Colloquium, 1927, "Velocity Selector for Atomic Rays"
- 18.1 Manuscript, "The Determination of the Magnetic Moment of The Hydrogen Atom", Kunz and Joseph T. Tykociner, 1928 including correspondence with Kunz
- 18.2 Velocity Selector Notes and Sketches, 1926-1927
- 18.3 Velocity Selector Materials and Correspondence (1929-1935) Zacharias (Hunter College, New York City), Professor Kruger (University of Illinois), Supply Companies Bell Telephone Labor, etc.
- 18.4 Velocity Selector testing (December, 1928 March, 1929 Jones)
- 18.5 Testing of Velocity Selector (Abel February June, 1931)
- 18.6 Velocity Selector testing (Taylor July August, 1931)
- 18.7 Bibliography
- 18.8 Velocity Selector Testing (January, 1932 September, 1932)
- 18.9 Velocity Selector Testing (Armstrong, 1932-1933) including photo of Vibration, details of Velocity Selector, principal parts of Velocity Selector and aluminum tape fresh, lost elasticity

- 18.10 Velocity Selector National Research Council correspondence, expense accounting, 1931-1935
- 18.11 Velocity Selector Material for description, photos and blueprints
- 18.12 Velocity Selector Publications, blueprints and manuscripts and Publication, <u>Velocity Selector for Atomic Rays</u>, 1927
- 18.13 Velocity Selector testing, September, 1933 November, 1934
- 18.15 Velocity Selector testing, December, 1934 December, 1935
- 18.16 Velocity Selector University Graduate School Fund, correspondence with Dean Carmichael, 1935-1936
- 19.0 Notes on Atomic Rays of Hydrogen (with Garner), 1936-1937
- 19.1 Selector and H-Atomic Rays experiments with Garner, January, 1936 October, 1936
- 19.2 H-Atomic Rays, October, 1936 March, 1937 including photo on reflected light
- 19.3 H-Atomic Rays, March, 1937 July, 1937
- 19.4 Notes on Discharges in H20 vapor preparation for eventual publication, 1937
- 19.5 H-Atomic Rays, Reprints and Bibliography
- 20.1 High Vacuum Technique Stuffing box seals, <u>Machined Metal Stuffing Box Seals</u>
 <u>Adapted to High Vacuum Technique</u> (L.P. Garner), 1937
- 21.0 Natural Frequency of Rails and Slender Bodies, 1932-1938
- 21.1 Determination of Natural Frequency and Damping of Rails, July, 1932 February, 1933
- 21.2 Ibid, February, 1933 April, 1933
- 21.3 Bulletin on foci of Slender Bodies; Material in preparation
- 21.4 Written copy of Bulletin
- 21.5 Typewritten Manuscript
- 21.6 Drawings and tables for bulletin
- 21.7 Bisesi's thesis, 1938
- 21.8 Material for Bulletin (Parts of Bisesi's thesis)
- 22.0 Methods of Detecting Fissures and Shatter Cracks in Rails, 1931-1933
- 22.1 Acoustical testing of steel rails (Bisesi), 1932, blueprints, photo, diagram
- 22.2 Various methods of detecting fissures
- 22.3 Detection of Inhomogeneities in Rails, 1933
- 22.4 Detection of Cracks in Fatigue Specimens by Electrical methods (Bisesi including photos, blueprints, diagrams, 1931-32)
- 22.5 Detection of Fissures by Rotating Armatures (Krause)
- 22.6 Bisesi's Master Thesis; Types of curves observed by Sperry method (not completed)
- 22.7 Detection of shatter-cracks by Ultrasonic waves
- 23.0 Notes on Early Piezo-Electric Investigations, 1926-1935
- 23.1 Piezoelectric oscillations, 1926
- 23.2 Ultrasonic waves, 1926-1927
- 23.3 (Lecture I), "Piezoelectricity, Its Scientific and Engineering Applications" an experimental lecture at the joint A.I.E.E. and Physics Colloquium, 1926 by Joseph T. Tykociner
- 23.4 Piezoelectric Vacuum Gauge, 1926-1927
- 23.5 "Precise determination of frequency with Piezoelectric Oscillators:, 1927 delivered American Physical Society
- 23.6 Photoelectric Charges Measured With Amplifier Tube, 1927
- 23.7 Piezoelectricity Lecture II "Piezoelectric Oscillations and Supersonic Vibrations" before A.I.E.E. and Physics Colloquium, Urbana, no date, Joseph T. Tykociner
- 23.8 Photoelectric Control of Piezoelectric Oscillators, 1926-1928
- 23.9 Ultrasonic Wavemeter (for publication) including photos, 1927-1928
- 23.10 Ultrasonic Wavemeter (for publication) including photos, 1927-1928

- 23.11 Piezoelectric Investigations (J.F. Brachen), 1928-1929
- 23.12 Piezoelectric Oscillations (Bibliography)
- 23.13 Piezoelectric Oscillations, Stabilizing AIp, and Simultaneous Production of Two Frequencies, 1929
- 23.14 Piezoelectric Oscillations, Ip, Io=f (co), 1929
- 23.15 Piezoelectric Wavemeter (Brooks), 1935
- 24.0 Missing
- 25.0 Piezoelectric Flexural Vibrations, 1935-1937
- 25.1 Piezoelectric Flexural Vibrations, 1935-1936
- 25.2 Piezoelectric Flexural Vibrations (Bibliography)
- 25.3 Theoretical Basic of Frequency Corrections
- 25.4 Y-Crystal Frequency Measurements, 1936
- 25.5 Paper on Flexural Vibrations, Illinois State Academy of Service at Quincy, "Flexural Vibrations of Piezoelectric Quartz Bars," 1936
- 25.6 Flexural Vibrations of Piezoelectric Quartz Bars and Plates (Manuscripts 1, Joseph T. Tykociner and Woodruff)
- 25.7 Flexural Vibrations Formulae, 1936
- 25.8 X-cut Flexural Vibration, 1936
- 25.9 Material for completing manuscript, 1936
- 25.10 Optimum Dimensions for Quartz Bars, 1936
- 25.11 Permitivity Density and E/p of Quartz
- 25.12 Flexural Vibrations of Piezoelectric Quartz Bars and Plates (manuscripts #2) including blueprints
- 25.13 Flexural Vibrations, Measurements New Series, no. 31-43, 1937
- 25.15 Missing
- 26.0 New Piezoelectric Experiments, 1935-1939
- 26.1 Laboratory Data for Quartz Crystals, 1935-1937
- 26.2 New Piezoelectric Experiments (B. Kowalski), 1936-1938
- 26.3 Quartz Ring Resonators (Carl M. Millner), June, 1938
- 26.4 Quartz Rings and Discs (Millner), 1938
- 26.5 Impedance of Quartz Resonators (Millner), 1938-1939

Box 24:

- 27.0 Vibration Magnetometer, 1937-1939
- 27.1 Vibration Magnetometer Principle, sketches, blueprints, photos, correspondence with Sonatone Corporation (New York) on equipment, 1937-1938
- 27.2 Sheets on tests of West EL 13-A Oscillator and G.R. Type 514 a Amplifier
- 27.3 Vibration Magnetometer Measurements, 1937-1938
- 27.4 Vibration Magnetometer "Vibration Method of Measuring Magnetic Fields" Manuscripts and bibliography
- 27.5 Vibration Magnetometer, Deviation from Induction Laws, 1938-1939
- 27.6 Vibration Magnetometer, Anomatics, 1938
- 28.0 Electroacoustic, Piezoelectric and Photoelectric Experiments (with G. Glan), 1937-1939
- 28.1 Pneumatic Loudspeaker, 1937
- 28.2 Vibrations of Steel Rods and Non-Magnetic Bodies, 1938-1939
- 28.3 Electroacoustic and piezoelectric experiments, 1937
- 28.4 Photoelectric Tachometer, 1938-1939
- 29.0 Electron Oscillators, 1930-1934
- 29.1 Barkhausen Oscillations (Singh), 1934

- 29.2 Barkhausen Oscillations (Singh), 1934
- 29.3 Barkhausen Oscillations (Tykociner) I, 1939 including Electron Oscillations in <u>Thermionic Tubes</u>, Joseph T. Tykociner and A.E. Abel, <u>American Physical Society</u>, Chicago, 1931
- 29.4 Barkhausen Oscillations (Abel) II, 1931
- 29.5 Barkhausen Oscillations (Abel) III, 1931-1932
- 29.6 U.H. Transmission lines, 1930
- 29.7 Barkhausen Oscillations, Resistance Measurement (Alfen Method), 1933
- 29.8 Distribution of I and E along Lecher System, 1931-1932, 1=90HO cm.
- 29.9 Barkhausen Oscillations, Determinations of Natural Frequency of External Circuit, 1932-1933
- 29.10 Curves Based on Measurements, 1933
- 29.11 Checking with Thermocouple Existence for pure Barkhausen Oscillations, 1933
- 29.12 Barkhausen Oscillation, Conclusions, 1931
- 29.13 Material for extending manuscript including photo of lab
- 29.14 Tracing for bulletin
- 29.15 Electron Oscillations manuscripts Tykociner and Abel
- 29.16 Electron Space Charge Oscillation Contents in bulletin
- 30.0 Notes on Investigations of Barrier Photo Cells, 1931-1932
- 30.1 Cu2O Photocell Investigation (Sarrtour), 1931-1932
- 30.2 Data on Commercial Types of Barrier Photocells
- 30.3 Bibliography on C20 Photocells
- 31.0 Notes on Photoelectric Research (Phototubes), 1935-1941
- 31.1 Accountancy, 1938-1941
- 31.2 Sensitization of photocells, August, 1936 December, 1937 (yellow sheets originals, notes made during experiments)
- 31.3 Sensitization of photocells, August, 1936 December, 1937, rewritten copies of notes
- 31.4 Sensitization of photocells, December, 1937 October, 1938
- 31.5 Sensitization of photocells, December, 1938 April, 1939
- 31.6 Sensitization of photocells, April, 1939 June, 1939
- 31.7 Photoelectric Research, June, 1939 November, 1939
- 31.8 Photoelectric Research, November, 1939 January, 1940
- 31.9 Correspondence with Garner, 1935-1940; including letters on patent rights on research
- 31.10 Correspondence with Professor Joel Stebbins, University of Wisconsin, 1938-1941
- 31.11 Photoelectric Research, January, 1940 March, 1940
- 31.12 Photoelectric Research, March, 1940 April 1940
- 31.13 Photoelectric Research, April, 1940 August, 1940
- 31.14 Photocells, Calibrations, Calculations and Description, 1939
- 31.15 Photocells, Calibrations, Calculations and Description, 1940

- 31.16 Photocells, Calibrations, Calculations and Description, September November, 1940, including abstract of paper delivered to <u>American Physical Society</u> in Chicago on photoelectric sensitization, November, 1940
- 31.17 Photoelectric Research, December, 1940 March, 1941
- 31.18 Sensitization by Optical Ionization, June October, 1940 including outline on a new photoelectric effect, September, 1940
- 31.19 Missing
- 31.20 Photoelectric Research, October, 1940 May, 1941

Box 25:

- 31.21 Graduate Research Board, 1938-1941 correspondence Dean Carmichael, Professor Enger (Engineering Experiment Station)
- 31.23 Index to Photoelectric Research, 1936-1941, original and typed copy of outline of all research projects on photocells
- 31.24 Description of production of phototubes sensitized by electric discharges in H2O vapor and drawing
- 31.25 Commercial Phototubes and Applications including correspondence to manufacturing cos.
- 31.26 Photoelectric Research, October, 1941
- 31.27 Procedures and Calibration of photocells (miscellaneous), 1939-1940
- 31.28 Production of Photoelectric Cells Sensitized by Electric discharges in Water Vapor
- 32.0 Missing
- 33.0 Photo Sensitization H2O Bulletin I, 1940
- 33.1 Bulletin Materials
- Original manuscripts o bulletin <u>Sensitization of Photoelectric Alkali Surfaces by Means of Discharges in Water Vapor</u> Joseph T. Tykociner, Jacob Kunz and Lloyd P. Garner
- 33.3 Preliminary Typewritten Copy
- 33.4 Original Sketches for Bulletin I including photo of equipment
- 33.5 Tracings for Bulletin I
- 33.6 Typewritten copy III of Bulletin I, sketches
- 33.7 Typewritten copy IV of Bulletin I, sketches and photo
- 33.8 University of Illinois Bulletin #325; November, 1940 <u>Photoelectric Sensitization of Alkali Surfaces by means of Electric Discharges in Water Vapor</u>
- 34.0 Investigation of Spectral Sensitivity of Photoelectric Surfaces, 1949-1941
- 34.1 Bibliography on Spectral Sensitivity Investigation
- 34.2 Spectral Sensitivity Measurements with Gaertner Spectrometer, November, 1939 July, 1940
- 34.3 Ibid, May December, 1940
- 34.4 Investigation with G.E., November, 1940 May, 1941; Automatic Spectral Sensitivity Curve Recorder for Photoelectric Cells with Sketches
- 34.5 Ibid, typewritten copy
- 34.6 Automatic Spectral Sensitivity Curve recorder for Photoelectric cells, May October, 1941, including abstract, "An Automatic Recorder of Spectral Sensitivity of Photo-Electric Surfaces"
- 34.7 Publication of Automatic Recording, including photos of equipment, "An Automatic Recorder of Spectral Sensitivity of Photo-Electric Surfaces" Joseph T. Tykociner and Bloom, (Journal of the Optical Society of America)
- 34.8 Manuscripts and material for bulletin including photos of equipment plus tear sheet of article (34.7)

- 34.9 Literature on Spectrophotometers
- 34.10 Spectral Sensitivity Investigation (original notes, August 16, 1941)
- 35.0 Phase Angle and Waveforms, 1940-1943
- 35.1 Index and Bibliography, October, 1941 March, 1941
- 35.2 Phase Difference including typed draft "A Phase Indication", February, 1941
- 35.3 Phase Difference; Math I Formulation of Waveforms
- 35.4 Phase Difference (April, 1941)
- 35.5 Manuscript, "Properties and Applications of Phase-Shifted Rectified Sine Waves (Joseph T. Tykociner and Louis R. Bloom)
- 35.6 Phase Difference (November, 1940 July, 1941)
- 35.7 Phase Difference (July, 1941 February, 1942)
- 35.8 Phase Difference (June, 1941 March, 1942)
- 35.9 Phase Difference (January, 1942 March, 1942)
- 35.10 Phase Difference (March October, 1942)
- 35.11 "Wave Forms of Phase-Shifted Sine Pulses and Their Applications" by Joseph T. Tykociner and L.R. Bloom, before Illinois State Academy of Science, May, 1942
- 35.12 Phase Difference Measurement with Oscillograph (May July, 1942)
- 35.13 Phase Difference figures photos of pulse readings, 1942
- 35.14 Copy V "Properties and Applications of Phase-Shifted Rectified Sine Waves" (identical with galley proofs)
- 35.15 Phase Difference (May, 1942 November, 1943) (Direct Reading Methods)
- 35.16 Phase Difference Math II (September November, 1942), Formulation of Average Effect and P values
- 36.0 Notes on Electrical Discharges in H2 and H2O Vapor, 1939
- 36.1 Discharges in H2 and H2O Vapor (contents of notes, 1939) experiment for 1939 including statement on Production of Atomic Hydrogen in regarding material for Patent Office Examiner
- 36.2 Discharges in H2 and H2O Vapor, 1939
- 36.3 Balmer Lines and Atomic Hydrogen, 1939 including correspondence with Benton Baker, Esq.
- 37.1 Calibration of Tru-Vac Gauge for 1941 (H2, N2, O2)
- 38.1 Harmonic Oscillator Using "D" and "S" Curves (1943)
- 39.1 Three Electrode Neon Lamps, Literature and Correspondence (1932-1941)
- 40.1 Spectral Sensitivity Investigation (1939-1941)
- 41.1 Shutter Design for Constant Energy (1941)
- 42.0 UHF Oscillations Investigations, 1942-1944
- 42.1 UHF Oscillators (January July, 1942) including correspondence with Professor Bromwell of Northwestern University
- 42.2 UHF Oscillator Magnets (February, 1942 February, 1944)

Box 26:

- 42.3 UHF Oscillators (September December, 1942)
- 42.4 UHF Oscillators (January, 1943 May, 1943)
- 42.5 UHF Oscillators (July, 1943 July, 1944)
- 42.6 UHF Oscillators (April September, 1943)
- 42.7 UHF Oscillators (December, 1943 May, 1944)
- 42.8 Microwave manuscript "Magnetion Oscillator for Instruction and Research in Microwave Technique" (Tykociner and Bloom), 1944
- 43.0 Progress Reports on Contract Experiments

- 43A Contract 223 Tunable Magnetrons, 1942-1946
- 43A (0) Material Possible relating to millimeter wave research, no date
- 43A (1) Magnetron Bibliography, 1942
- 43A (2) Report (Range: 1500-3500 megacycles per second), September, 1944 July, 1945 including equipment photos
- 43A (3) Report (Range: 3000-6000 megacycles per second), May, 1945 May, 1946 including equipment photos
- 43B Contract W28-099-ac-126: Millimeter Wave Research, 1946-1948
- 43B-1 Survey of Electrical Engineering Research Program (no date)
- 43B-2 AAF-AMC University Research Program; Summary Reports, 1947
- 43B-3 #126 Conferences, Programs and Tasks, 1946-1948
- 43B-4 Shop Requisitions for #126 and #14538 (1946)
- 43B-5 Technological Notes
- 43B-6 Mathematical Analysis, c. 1947
- 43B-7 Experimental Work, 1947
- 43B-8 Experimental Work, 1947
- 43B-9 Experimental Work, January 1 July 31, 1948
- 43B-10 Experimental Work, July September, 1948
- 43B-11 List of Oscillators
- 43B-12 Bibliography
- 43B-13 Outside Reports
- 43B-14 Drawings, 1946-1947
- 43B-15 Oscillator Diagrams, 1946-1948
- 43B-16 Mass Radiator Ivan Baucom, Jr., 1947
- 43B-17 Washington Trip, may, 1947; including Joseph T. Tykociner request for clearance to visit naval research lab, April, 1947
- 43B-18 Written draft for 10th quarterly progress report, 1948, and first quarterly progress report for AF19(122)-5 an extension of (#126)
- 43B-19 First Quarterly Progress report July, 1946 September, 1946, including Joseph T. Tykociner trip to New York; Chicago; Cambridge, Massachusetts; New Haven, Connecticut (June 21 July 2, 1946) Bibliography
- 43B-20 Second Quarterly Progress Report October -December, 1946 including equipment photos and bibliography
- 43B-21 Third Quarterly Progress Report, January March, 1947 including bibliography
- 43B-22 Fourth Quarterly Progress Report, April June, 1947 including equipment photos and bibliography
- 43B-23 Fifth Quarterly Progress Report, July September, 1947 Sixth Quarterly Progress Report, October December, 1947, equipment photos and bibliography
- 43B-24 Seventh Quarterly Progress Report, January March, 1948, including bibliography and equipment photos
- 43B-25 Eighth Quarterly Progress Report, April June, 1948, including bibliography and equipment photos

- 43B-26 Ninth Quarterly Progress Report, July September, 1948, including bibliography and equipment photos
- 43B-27 Copies of drawings and photos for #126 reports (1-10)
- 43B-28 Manuscript for #126
- 43B-29 Project Sheets, 1948
- 43B-30 Material to be assorted, 1948
- 43B-31 Type E and G Tube (March May, 1948)
- 43C AF19(122)-5 Millimeter Wave Research, 1948-1951
- 43C-1 Report 5-1; October December, 1948; including equipment photos
- 43C-2 Report 5-12; January September, 1951
- 43C-3 Report 5-13; September December, 1951
- 43C-4 Tykociner and Wax, N. "Millimeter Wave Research," October 1 December 3, 1948

Box 27:

- Contract W33-038-ac-14538; Wide Range Tunable Low Power Magnetrons for Frequencies above 2000 Megacycles, 1946-1949
- 43D-1 Office Organization, 1947-1948 including memos on conference equipment for projects #s 126 and 14538
- 43D-2 Magnetron Bibliography
- 43D-3 Magnetron Conferences, 1946-1947
- 43D-4 Magnetron Experiments, miscellaneous expenditures for renewal of contract, #14538
- 43D-5 Magnetron Tuning Conference, Naval Research Laboratories, 1947, and RCA visit, 1947, by Bloom and Joseph T. Tykociner at Princeton
- 43D-6 (First and second progress reports missing) Third progress report, September November, 1946
- 43D-7 Fourth Progress Report, November, 1946 January, 1947
- 43D-8 Fifth Progress Report, January March, 1947 including equipment photos
- 43D-9 (Sixth report missing) Seventh Progress report, May July, 1947 including equipment photos
- 43D-10 Eighth Progress report, July, 1947 September, 1947
- 43D-11 Ninth Progress Report, September, 1947 November, 1947
- 43D-12 Tenth Progress Report, November, 1947 January, 1948, lab photos
- 43D-13 Eleventh Progress Report, January, 1948 March, 1948, including equipment photos
- 43D-14 Twelfth Progress Report, March May, 1948
- 43D-15 Thirteenth Progress Report, May July, 1948
- 43D-16 Fourteenth Progress Report, July, 1948 September, 1948
- 43D-17 Fifteenth Progress Report, September November, 1948
- 43D-18 Sixteenth Progress Report, November, 1948 January, 1949
- 43D-19 Seventeenth Progress Report, January March, 1949
- 43D-20 University of Illinois Vacuum Tube-Research Laboratories, a report
- 44.0 Striation experiments, 1952-1959
- 44.1 Index to Striation Experiments including contents to notes on experiments, 1952-1954, correspondence with Louis R. Bloom, August 3, 1955
- 44.2 Experiments, October December, 1952
- 44.3 Experiments, December, 1952 May, 1953
- 44.4 Experiments, June July, 1953
- 44.5 Experiments, August December, 1953
- 44.6 Experiments, March June, 1954
- 44.7 Experiments, July December, 1954

- 44.8 Experiments, January April, 1955
- 44.9 Approach to theory, c. 1953
- 44.10 Equipment, 1953-54
- 44.11 Tube Experiments, c. 1955
- 44.12 Laboratory Data Sheets; Data by Charles Rawlings, 1957
- 44.13 Experiments, June September, 1957 (V. F. Dickey)
- 44.14 Requisitions, 1957
- 44.15 Experiments, 1958 (Larry Heacock) including lab photos
- 44.16 Notes, 1958-1959 including letter to Dr. L. Goldstein, University of Illinois Director, Gaseous Electronics Laboratory, December 3, 1958
- 44.17 Unclassified Notes on Striation Experiments, 1952
- 44.18 Plans for Glass Blowing, 1957
- 44.19 Striations Bibliography
- 44.20 Experiments, 1956-1957

A - Abstracts

Tykociner collected his abstracts monthly and numbered them numerically according to chronological sequence under <u>Scientific</u> abstract series, A and B. Eventually he broke down the abstracts according to subject matter, arranging them in chronological sequences, A and B series. As a result two general files were found containing abstracts collected according to year, and those arranged according to subject content, subdivided according to year. Several folders were found showing his arrangement of abstracts into months of the year, A and B series. For several folders, Tykociner provided indexes of two sorts, those which were listed numerically followed by the name of the author and the other which listed the authors alphabetically with the chronological number beside it. Still others had an added number in parenthesis, designating the subject content of the abstract. None of the folders contained abstracts filed alphabetically according to author. Enclosed in this collection are several subject files and one file containing all the abstracts Tykociner collected for one year, 1939. Where, in later years, abstracts were not broken down into subject categories, they have been removed from the yearly folders and filed along with his subject folders according to his own numerical sequence. (list of Abstract Classification at end of finding aid)

- A.1(a) Reviews of Pure and Applied Physics, 1932-1943
- A.1(b) Reviews of Pure and Applied Physics, 1944-1948
- A.2(a) Photoelectricity and Phototubes, 1929-1933
- A.2(b) Photoelectricity and Phototubes, 1934-1939
- A.2(c) Photoelectricity and Phototubes, 1940-48
- A.3(a) Photoelectric Circuits and Application, 1930-1940
- A.3(b) Photoelectric Circuits and Application, 1941-1948
- A.4 Piezoelectricity and Applications, 1938-1948
- A.5(a) Ultra High Frequency Oscillations, 1936-1943
- A.5(b) Ultra High Frequency Oscillations, 1944-1948
- A.6(a) Laboratory Apparatus, Methods and Instruments, 1935-1943

Box 28:

- A.6(b) Laboratory Apparatus, Methods and Instruments, 1944-1948
- A.7 Nuclear Physics and Applications, 1939-1948 including Joseph T. Tykociner's data on Enrico Fermi, 1950's and Newton, 1950's
- A.8 Abstracts filed in 1939 with alphabetically listed index
- B. Copies of Paper Master and Doctor Thesis

B.1 Tarplay, Raymond Edward (for M.S.) <u>An Oscillographic Study of Corona Discharge</u>, 1929

- B.2 Hubbard, Linus Otto for (M.S.) <u>A Stroboscopic and Oscillographic Study of Corona Discharge</u>, 1930; Laning, Jr., Willard Arthur, (M.S.), <u>Oscillations in a Corona Discharge</u>, 1931
- B.3 West, Robert James (for B.A) <u>A Study of the Western Electric Light Valve</u>, 1931; Armstrong, John Henry (M.A.) <u>A Study of the Photo-Electric Valve</u>, 1932; Woodruff, Marion Whitefield (M.S.) <u>Electro-Acoustic Oscillations Excited by Fleural Vibrations</u>, 1935
- B.4 Carter, Benjamin Ferris (M.S.) <u>Influence of an Inductively Coupled Circuit on the Grid Current of a Barkhausen Oscillator</u> (1931) including photo of equipment; Abel, Adam Eisler, Jr., (M.S.) <u>Electron Oscillations in a Thermionic Tube</u>, 1932; Singh, Bhagat (M.S.) <u>The Study of a Coupled Circuit Energized by Electron Oscillations</u>, 1934
- B.5 Brooks, Wesley Wilson (M.S.) <u>Piezoelectrically Controlled Audio-Frequency Oscillator</u>, 1936, including equipment photo; Stewart, James Albert (M.S.) <u>Piezoelectric Resonators</u>, 1937
- B.6 Laning, Willard Arthur Jr. (Ph.D), <u>Oscillations in Corona Discharges in Rarified Air</u>, 1938, including equipment photos
- B.7 "Oscillations in Corona Discharges in Rarified Gases," including experiments in addition to Laning's Ph.D. thesis (1938)
- B.8 Bloom, Louis R., "The Kunz type of Photoelectric Cell," 1939
- B.9 Mose, James Curtis Jr., <u>Investigation of an Electronic Oscillating Space-Charge Coupled</u> with Parallel Wire Systems, (Ph.D. Thesis 1940) including equipment photos
- B.10 Wilson, Burton James, <u>The Selenium Barrier Layer Photoelectric Cell</u>, (B.S. Thesis, 1943)
- B.11 Bliss, Gilbert Bartholomew, <u>Low-level Wide Band Micro-Wave Power Measurements</u> (Ph.D., 1949)
- C.0 Annual Research Reports and Budgets
- C.1 Budgets, 1929-1940
- C.2 Research Reports, 1922-1940
- C.3 Research Reports, 1941-1946
- D.0 Copies of Equipment Orders (sample selection)
- D.1 1929-1931
- D.2 1934-1935
- D.3 1939-1940
- E.0 Patents Cable Testing
- E.1 Data for Cable Testing Patent, 1930, including copy of University of Illinois Patent Policy, letters to Paine and attorneys
- E.2 Patent Applications
- E.3 Cable Testing Patent Amendments, 1931-1933
- E.4 Cable Testing Patent Specifications
- F.1 Patents on the Improvements in the Photoelectric Cell, 1938
- G.0 Patent Applications for New Phototubes, 1937-1941
- G.1 Material for Patent Specification
- G.2 Manuscript of Patent Specification
- G.3 Photocell Patent Application No. 1
- G.4 Patent Office Action No.1, 1937-1939 including correspondence with Benton Baker, Esq.
- G.5 U. S. Patent Office References Quoted including U. S. and foreign patents concerning photoelectric cells
- G.6 Phototube Patent Specifications, #1 and #2 1) Tykociner, Kunz and Garner,

- "Phototube," filed 1938, patented 1940; 2) Tykociner, Garner and Kunz, "Phototube," filed 1939, patented 1941
- G.7 Divisional Patent H₂O including correspondence, Benton Baker, 1941
- G.8 British Application #1 including correspondence Benton Baker, 1939-1940
- G.9 British Application #2 including correspondence Benton Baker, 1940-1941
- G.10 References cited by British Patent office
- G.11 Canadian Application, photocell including correspondence Benton Baker, 1940-1941
- G.12 British Patent #527484, Board of Trustees, University of Illinois, Improvements in Photoelectric Cells and Method for Making, Sensitizing and Stabilizing the same," 1940
- G.13 British Patent #527353, same as above, 1940
- G.14 Correspondence with firms interested in cells, 1940 including Samuel Wein; Dr. W. A. Reuse (L.S.U.); President A. C. Willard (University of Illinois), 2/23/40; 2/28/40; R. E. Tarplay (former student) Leeds and Northrup Company; U. A. Sanabria, President, American Television Institute, Inc.

Box 29:

- G.15 Television (Patent Specifications)
- G.16 Patent Miscellaneous, 1936, 1939 including University of Illinois form, "Articles of Agreement"; article "Know your Patent Rights"
- G.17 Tykociner's report to the Board of Trustees, 1942, on the history of the University's photoelectric cell research
- H.0 Experiments prior to and at Westinghouse, 1920-1921
- H.1 Experiments on Endatomous Structures, 1920 including correspondence with Dr. Silberstein (Rochester), patent attempts for coils, loops and variable inductances and girder, correspondence S. Bokman (in Russian)
- H.2 Behavior of Contacts between magnetized electrodes, 1920
- H.3 Tube Research, 1920
- H.4 Cathode Ray Oscillograph, 1921
- H.5 Cathode Ray, 1921
- H.6 Arc Oscillator, 1921
- H.7 Measurement of high vacua, 1921
- H.8 Amplification by means of Electrolytic cells with Aluminum electrodes, 1921
- H.9 Report upon Compression tests on steel tubing made for Tykociner, 1920
- H.10 System of ignition and indicating devices for internal combustion motors and explosive chambers, 1921
- H.11 Miscellaneous notes made at Westinghouse, 1921
- I.0 Assorted notes, experiments, lectures, 1915-1929
- I.1 "Mobility of the Negative Ion" by S. Ratner, 1916

- I.2 Miscellaneous experiments and material, 1919-1926 including experiment, "Relation between current and . . . actions of mercury arc upon cinema film"
- I.3 Research on quartz, 1921-1926
- I.4 Atomic Structure and Spectral lines, notes by Tykociner on Kunz' lectures, 1922
- I.5 "Electric Phenomena on the Surface of some semi-conducted bodies," 1922 presented at the Illinois State Academy of Science, includes research for presentation
- I.6 Production of Hertzian Oscillations by means of light on Thermo radiation, 1922
- I.7 Notes on Modulation, c.1923
- I.8 X-rays and Crystal Structure, 1924
- Professors Kunz and Tykociner's rejected book proposal, <u>Applications of the Photoelectric Cell</u>, 1924 including correspondence with E. P. Hamilton, Secretary of John Wiley and Sons, 1924; Bibliography; publications on the Kunz photo-electric cell, 1924; reprints Stebbins, Joel, "Early Photometry at Illinois, 1957; Mill, F. E., "Linear Amplification of Galvanometer Deflection by the Photoelectric Cell," 1926; Shinomiya, T., "Color Sensitiveness of Photo-electric cells," 1919; Pike, Carl E., "Amplification of the Photoelectric Current by means of the Audion," 1919; Randolph, James R., "Using the Photoelectric cell as a Photometer," 1917; Nathanson, Jonas B., "The Reflecting Power of the Alkali Metals," 1916; Schulz, W. F., "The Use of the Photo-electric cell in Stellar Photometry," 1913; Kemp, J. G., "Conditions of Sensibility of Photoelectric Cells with Alkali Metals and Hydrogen, 1913; Anderson, S. Herbert, "Rectifying Properties of a Photo-electric cell," 1913; Woodrow, Jay W., "A Spontaneous Electromotive force in cells of alkali metals," 1921; Kunz, Jakob and Kemp, Jakob G., "Alber photoelectrische Indikatoren fur Electormagnetisch Wellen," 1911 (German)
- I.10 "Antennae Models and short wave transmitters," 1925 presented before the Institute of Radio Engineers, Chicago
- I.11 Photoelectric discharge tubes (G-M), 1926
- I.12 Ionization Currents and the breakdown of insulation (Discussion), AIEE, 1929
- I.13 To be assorted, miscellaneous, including research, 1923-1930, correspondence with Professor Oboukoff Harbin, Manchuria, Questionnaire on the Psychology of the Inventor Lecture "Impression of European Laboratories," 1928, course work outline on "Recent Progress in Applied Electricity", correspondence Dienner, Esquire on patents
- I.14 "Ions, Electrons and Ionizing Radiations," by Crowther, James Arnold, 1919
- I.15 Articles and notes on articles, 1919
- I.16 Oil Cracking by electrical discharges including correspondence with C and C Developing company for a job, 1921
- I.17 "Photoelectric Valve" delivered before the Physics Colloquium, 1924
- I.18 Kennely-Heaviside Layer (used in a talk delivered in 1929)
- I.19 "International Scientific Cooperation and the League of Nations" given before Epsilon Chi Fraternity, 1928
- I.20 Lecture on European Radio Station, c. 1929
- I.21 First lecture on high voltage, 1928
- I.22 Permanent Electrets, their preparation and properties, 1926
- I.23 "A New Photoelectric cell," American Physical Society, 1923
- I.24 Memorandum, 1929 on Tykociner's Methods and apparatus for antennae investigations (c. 1924-5) including "Determination of frequency and Decrement by means of plate current variations of thermionic oscillator tubes," by Joseph T. Tykociner and R. W. Armstrong before American Physical Society, 1929, list of publications, c. 1929
- I.25 Variable Inductance correspondence 1923-1925
- I.26 Early material, c. 1919
- I.27 Contribution to the discussion of the Annual Report of the Committee on Research,

- delivered 1927
- J.0 Tykociner's Leave of Absence, September, 1927 1928
- J.1 Sample of technical materials collected in Europe (Polish, German, American)
- J.2 Experiments of Van Hableitern Göttingen, 1927
- J.3 University of Göttingen
- J.4 Correspondence in connection with and during leave of absence, 1927-1928
- J.5 Report on Sabbatical year, 1927-1928
- J.6 Lectures in Warsaw, 1928, Piezoelectric oscillators; selector for atomic rays; shorts waves 3-6 m
- K.0 Assorted notes, experiments, lectures, 1930-1939
- K.1 Terrestrial Magnetism, 1930 Notes regarding Mr. Gaissler's Thermo-Electric theory on the Earth's Magnetic Field
- K.2 Philosophy of Social Problems, 1931
- K.3 Social Planning, 1934 including paper read before Urbanism group, Urbana, "Coordinations of the problem of the development of the modern city in connection with national and regional planning"
- K.4 Electrical energy as a factor in planning statistical data, 1934-1935
- K.5 Lecture on planning, 1935
- K.6 Electrical energy as a factor in planning, c. 1936
- K.7 The Jewish Problem, c. 1936 including Polish newspaper articles
- K.8 Sokoloff's paper, 1934-1935, correspondence with Professor E. R. Watson (University of Illinois, Education, <u>Acoustical Society of America</u>), on translating and editing Sokoloff's paper
- K.9 "The Theoretical value of a magnetron", seminar lecture, 1936
- K.10 "The Radio Amateur and His Universe," talk given to Synton Club, Urbana, 1936
- K.11 M. F. Oscillation; new method, 1936
- K.12 Bibliography, c. 1937
- K.13 Note on Professor Paine's broadcast on short waves, 1939 including notes on depression conditions
- K.14 "Poland and the Peace of Europe," given before the International Forum, YMCA, 1934
- K.15 Material Tykociner did not segregate, 1930
- K.16 Lecture on Dielectric Research, c. 1930's
- K.17 Discussion on the problems of urban life, c. 1932
- K.18 Research Problems, c. 1932
- K.19 Lecture on cable testing methods before the Utility Research Commission, 1930
- K.20 "Method of detection and measurement of ionization in dielectrics," before Illinois Academy of Science, 1933
- K.21 Professor Tykociner on the prospects of television, c. 1939
- L.0 Assorted Notes, Experiments, lectures, 1940-1949
- L.1 Program for Photoelectric investigations, 1941
- L.2 Nuclear physics course, 1941-1942
- L.3 New Ideas, 1942-1943
- L.4 Square-Wave Generator, 1943-1944
- L.5 Material Tykociner did not segregate, 1946 including correspondence with Louis R. Bloom
- L.6 Script on photocell applications, 1946 including correspondence with Dr. Zawadzki, Chairman, Committee for Rehabilitation of Polish Science and Culture, Inc., Elsie Deutsch, Special Events Section, International Broadcasting Divisions, OIC, Department of State, U.S.A.; transcripts: Dr. W. L. Everitt, "Radar" (Polish and English)
- L.7 Essay on Democracy, c. 1947

- L.8 Material Tykociner did not segregate, 1947-1948 including correspondence Gilbert B. Bliss, schedules of meetings and research on magnetions
- L.9 Wave Gauge Theory, 1948-1949
- L.10 Atomic Energy Notes, including notes on Fermi, 1940-c. 1954
- L.11 National Electronics Conference, 1948 (Chicago)
- L.12 Betatron, 1946
- L.13 Committee Chairman for Gilbert Bliss, 1948
- L.14 "Sensitization of Photoelectric Surface by Electrical Discharges in Water Vapor and Atomic Hydrogen,: before American Physical Society, 1940
- L.15 "The Effect of Deuterium and of Electrical Discharges indeuterium Oxide on the Sensitization of Photoelectric Cells," American Physical Society, 1940
- L.16 "Education for Research," 1949
- L.17 Westinghouse Nuclear Physics Charts, 1949; General Electric Isotope Chart, 1948
- M.0 Assorted Notes, Experiments, Lectures, 1950-1969
- M.1 Various ideas in technological science and social organization, ca. 1950
- M.2 Various Notes on articles, research, lectures, 1952
- M.3 Recent Bibliographical Notes, ca. 1960 including a table on the development of electrical engineering
- M.4 Lecture notes taken on Physiology, 1949-1950
- M.5 Lecture notes taken on Philosophy of Science and History of Art, 1950
- M.6 Lecture notes taken on Philosophy of Art, Ethics, and International Conflicts, 1951-52
- M.7 U. S. and Russian attitudes, 1951

Box 30:

- N.0 Undated Material
- N.1 Notes repetitor of mathematics (German)
- N.2 Kristallograph Praptikum (German)
- N.3 Research Notes (German)
- N.4 Lecture notes
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Box 32:

R. (T)

Motion Picture Patents, I, 1920-29

Case I, 1922-1928, including correspondence and patents; William L. Abbott, Esq., President of University of Illinois Board of Trustees; Correspondence regarding L. DeForrest Claim

Zworykin, V. K., et. al., "A Scanning Electron Microscope," 1942

on Kunz Cell, 10/21/25; Correspondence on DeForest Patents, 8/16/22, 8/17/22, 3/26/23, 3/29/23, 5/31/23, and 9/15/23; Collins, Lee A. Patent: "Method of and Apparatus for the Reproduction of Sounds and Motions, NUSA, filed 1917, patented 1921, see behind letter, 8/18/22; Horace Dumors on Lauste patents, 8/2/22

Case II, 1922-1930, similar to Case I, correspondence and patents

Case III, 1922-1925, correspondence and patents

Case IV, Variable Electric Unit, 1922-1924, patents and correspondence

Case V, Method of Means for Transmitting Recording and Reproducing Sound, 1922-1927, patents and correspondence

Case VI, Photoelectric Valve, 1926-1927

Case VII, Sound Recording, 1929-1937, 1934-1937

General Correspondence, Brown, Boettcher, and Diennes, Esq., 1922-1929

Westinghouse concedes rights on inventions by Tykociner, 1920

History of Talking Motion Pictures, 1921 including list of Tykociner's inventions, report to the Committee appointed to investigate Tykociner's inventions, "Methods of Recording and Reproduction of Sound on Variation of Electric Currents especially in connection with cinematographic films," 1921

Fox-Case correspondence, 1926-1929 - correspondence with Fox-Case representatives; Professor Ballard, Cornell University; see Option after 11/17/27 letter

Orders for Apparatus (University of Illinois), 1921-1922

Patent Specifications - Variable Electric Unit, patented 1924; Method of and means for transmitting, recording and reproducing sound, patented, 1923, 1927; Method of and means for reproducing sound, patented 1926

Box 33:

Motion Picture Patents II and Zworykin Cases, 1930-1938

Competing Patent Specifications - talking Motion Picture

Lauste, E. A., "Improvements in and relating to Sound Recording and Reproducing Devices and the Like," England, filed 1912, patented 1913

Pierce, G. W., "apparatus for Amplifying or Detecting Electrical Variations," U.S.A., filed 1913

Jenkins, C. F., "Radio Receiving Device," patented 1914, U.S.A. filed 1922, patented 1925

DeForest, Lee, "Apparatus for Use in Wire or Radio Communication," U.S.A., filed 1915; patented 1917

"Oscillation - Generator, U.S.A.," filed 1915; patented 1919

"Apparatus for use in Wire or Radio Communication," U.S.A., filed 1916, patented 1919, also see Collins, L. A. patent on Sound and Motion Pictures, Motion Picture Patent I, Case I

Competing Patents for Case V

Deforest, Lee, "Means for Recording and Reproducing Sound," U.S.A., filed 1919 and 1920, patented 1923 and 1924

Ries, Elias E., "Sound Recording Method," U.S.A., filed 1913, divided patent filed 1923; patented 1923

Weintraub, E., "Method of Changing Resistance in a Circuit and Apparatus Therefor," U.S.A., filed 1916, patented 1917

Pierce, G. W., "Apparatus for Amplifying or Detecting Electrical Variations," U.S.A.,

- filed 1913; patented, 1914
- Colpitts, E. H., "System for the Transmission of Intelligence," U.S.A., filed 1914, patented, 1915, filed reissues, 1917, patented, 1917
- Craig, R. M., "Phonographic Attachment for Moving-Picture Machines," U.S.A., field 1913, patented 1918
- Fitch, A. L., "Transmission System," U.S.A., filed 1917, renewed 1918, patented 1921 Harrison, Walton, "Telephone Transmission," U.S.A., filed 1908; patented 1915
- Hewitt, Peter Cooper, "Vacuum Electric Apparatus," U.S.A., filed 1916, patented 1922
- Doule, Harold P., "Rectifier," U.S.A., filed 1921, patented 1922
- Hulsmeyer, C., "Telephonogram Apparatus," U.S.A., filed 1902, patented 1904

Other Patents Related to Sound on Film

- Nakkin, T. H., "Method and Equipment for the Transformation of Sound Vibration and Variations of Intense Light," France, 1922 (French)
- Graaff, Wilhelm, "Improvements in or Relating to Apparatus for Producing Sound Record Films," England, 1922
- Vogt, H., "Improvements in or Relating to Microphone and the Like," England, 1921
- Hoxie, Charles A., "Recording Sound," U.S.A., filed 1921, patented 1926
- Anderson, Frank, "Automatic Telegraphic Recorder," U.S.A., filed 1889, patented 1889
- Anderson, Hans C. A., "______," Denmark, 1918 (Danish)
 DeBernachi, Francesco, "Fascimile Telegraph," U.S.A., filed 1911, patented 1913
- Bullis, Henry C., "Talking-Picture Apparatus," U.S.A., filed 1915, patented 1920 "Method of Producing Magnetic Sound-Records for Talking Motion Picture Films," U.S.A., filed 1915, patented 1917
- Canton, A. A., "_____ for the simultaneous recording of motion pictures and sound and for the reproduction of sight and sound," France, 1913 (French)
- Coblentz, W. W., "System of Electrical Control," U.S.A., filed 1920, patented 1923
- Craig, R. M., "Moving-Picture Machine," U.S.A., filed 1913, patented 1918
- DeForest, L., "Light-Controlling Means," U.S.A., filed 1921, patented 1923
 - "Means for Recording and Reproducing Sound," U.S.A., filed 1919, patented 1923
 - "Sound-Controlled Means for Producing Light Variations," U.S.A., filed 1921, patented 1923
- Dirzuweist, John F., "Recording and Reproducing Sounds," filed and patented, 1907
- Engl, Dr. Josef, "Improvements in Means for Recording Sound Vibrations Photographically," England, applied and patented, 1921
- Fritts, "Recording and Reproduction of Pulsations or Variations in Sounds and Other Phenomena," U.S.A., filed 1880, patented 1916
- Schrater, Fritz, (German), "Gas Relay," U.S.A., filed 1920, granted 1921
- Fritts, C. E., "Record of Light, Sound and Analogous Phenomena and Process and Apparatus for Producing the Same," U.S.A., filed 1880, 1912, patented 1917 "Means for Producing, Controlling and Utilizing Electric Currents," U.S.A., filed 1880, 1912, patented 1917
 - "Record of Pulsations of Sound and Analogous Phenomena and Process and Apparatus for producing the same," U.S.A., filed 1880, 1912, patented 1917
- De Guillen Garcia, "Means for Electrical Transmission of Designs, Figures and Photographs," U.S.A., filed and patented 1908
- Hedick, Wilhelm, "Improved Method and Apparatus for Recording and Reproducing Sounds and Electric Currents," England, 1888

Haines, R. T. and Lauste, E. A., "A New or Improved Method of and Means for Simultaneously Recording and Reproducing Movements and Sounds," England, patented 1907

Kruk, O. O., "Telephotography," U.S.A., filed 1907, patented 1910 Lenczycki, M., "______," (French) patented 1913 Rosenberg, A "Cinematographic Apparatus," U.S.A., filed 1901, patented 1902

Rutzen, August C., "Means of Recording and Reproducing Sound and Motion in Synchronism," U.S.A., filed 1914, patented 1918

Stacks, H. B., "Apparatus for Recording Sounds Photographically," U.S.A., filed 1915, patented 1918

Tarsiter, S., "Recording Correlated Light and Sound," U.S.A., filed 1915, patented 1918 Waltz, E., "Improvements in the Recording and Reproduction of Sounds by Means of a Sound Succession Relief," England, filed 1920, patented 1922

Vansize, W. B., "Recording Correlated Light and Sound Effects," U.S.A., filed 1915, patented 1917

Vladimir Kuzmitch Zworykin vs. Farnsworth Case, Correspondence, July-October, 1933; Samuel B. Smith, Esq., R.C.A. and Joseph T. Tykociner regarding case, testimony, questions and answers; Zworykin, October 19 and 21, 1933

Zworykin vs. Farnsworth - II; Material in Russian, 1921; Copy of letter of Zworykin to Tykociner on Invention, 9/25/21; Original Zworykin disclosure of invention in Russian; Translation of Zworykin's disclosure; prints of Farnsworth's Motion to Dissolve; Brief for Zworykin in Opposition to Farnsworth's Motion to dissolve

Zworykin vs. Farnsworth - III - Patent Office Decision Denying the Farnsworth Motion to Dissolve Farnsworth's Motion for Permission to take expert testimony; Donald K. Lippincott's affidavit; Leonard B. Loeb Testimony; Frederick E. Terman testimony; Farnsworth Patent "Television System," patented 1930

Zworykin vs. Jenkins vs. Mathes vs. Round, Correspondence 1934 with Samuel B. Smith, Esq. Zworykin vs. Jenkins vs. Mathes vs. Round - II - including correspondence with Samuel B. Smith, Esq.; Zworykin to Joseph T. Tykociner, 10/24/33; Notes on Zworykin's original

Zworykin vs. Round - III - correspondence, 1937-1938 with Mr. Lyle (Westinghouse), Mr. Smith, Esq. (R.C.A.); Tykociner affidavits; Kunz Affidavit; Jakob Kunz "Photoelectric Cell, Method of and Means for Making the Same," U.S.A., filed 1918, patented 1921

Zworykin Cases - Patent Office Booklet - "Briefs on behalf of appellant Vladimir K.Zworykin;" "Excerpts from Interference Records Showing History Thereof Where Pertinent to Questions here Involved;" Transcript of evidence, Westinghouse vs. R.C.A.

Patents - with Office Seal and Letter, 1961 - 1493713, Tykociner, "Variable Electric Units," 1924; 1590399, Tykociner, "Method of and Means for Reproducing Sound," 1926; 1640557, Tykociner, "Methods of and Means for Transmitting, Recording and Reproducing Sound," 1927; 2098364, Tykociner, <u>Ibid.</u>, 1937; E. B. Paine, et. al., "Method of and means for testing insulation," 1934 and "Method of and Means for Testing Cables," 1934 - no seal

Box 34:

Tykociner's Zetetics Publications

Research as a Science - Zetetics, 1959 Evaluation, History, and Zetetics, 1962

Bridge, "Evolution, History, and Zetetics," 1963

Zetetics and Areas of Knowledge, 1964

Phi Kappa Phi Journal, "Zetetics and Its Principles," 1964

Outline of Zetetics; A Study of Research and Artistic Activity, 1966

Descriptive Inventory of the Arts and Sciences, 1967

Zetetics and Its Relation to Education and Research, 1968

Zetetics: Definitions for an Inventory of Arts and Sciences

Box 35:

List of Sciences, Nos. 1, 2, 3, 4

List of Sciences, No. 5

List of Sciences, Nos. 6 and 7

Original manuscripts as used by the printers - Part One, Research as a Science, 1959

Research as a Science, drawings in first edition

Addition to Second Edition of Zetetics

Changes for third printing of Zetetics

Original Camera Ready Copy-Outline of Zetetics, 1966

Changes and additions intended for publication, first copy, Zetetics for and II, <u>Definitions for an Inventory of Arts and Sciences</u>

Changes and Additions intended for Publications; Second copy, <u>Ibid</u>.

Zetetics Classified Bibliography

Box 36:

- I/1A Accountancy Zetetics, 1963-67
- I/1B Accountancy, Zetetics Books Sold, 1967
- I/2 Publishers' Recent Correspondence, 1958-1968
- I/4 Zetetic Copies Mailed for Review
- I/5 Correspondence regarding opinions of Tykociner's publication on Zetetics, 1960-1968
- I/7 Zetetics Sponsorship, 1960
- I/8 Zetetics Committee (University), 1962
- I/9 Graduate School Grant, 1960-68 including correspondence Dean Wall, Chairman of the University Research Board, T. T. Robinson
- I.10^a Assistantships, Morton T. R., 1964
- I.10^b Assistantship, Dr. Kargon, Robert, 1964, appointed Research Associate, Summer, 1964
- I.10^c Assistantship, T. E. Herbeck, 1967-1968
- I.10^d Assistantship, (Mrs.) Sharon Smith Hult, 1967
- I.10^e Assistant, Jeffrey Schultz, 1969
- I.10^f Assistant, Wayne Crouch, mostly correspondence, 1966-1967
- I.10^g Assistant, Lary S. Belman, 1966-1967 Lary Belman, Zetetics Notes, 1966
- I.10^h Assistant, Susan L. Campbell, 1966
- I.10ⁱ Assistant, Janice Bear, mostly correspondence, 1967-1968
- I.10^j Assistant Allen George Taylor, mostly correspondence, 1966-1968
- I.10^k Assistant, John Zaruba, 1968-69
- I.10^m Assistantship, Marge Pakta, 1967
- I.10^{m1}/2 Assistant, Holley Grady
- I.10ⁿ Assistant, Hector I. Munoz, (tasks), 1964-1966
- I/11 Zetetic Circle general, 1961-1962
- I/12 Zetetic Circle, 1959-1960
- I/13 Zetetic Circle, 1960-1961

Box 37:

- I/14 Zetetic Circle, 1961-1962
- I/15 Zetetic Circle; 21st Meeting; January, 15, 1963
- I/16 Zetetic Circle, 22nd Meeting, February 19, 1963
- I/17 Zetetic Circle, 23rd Meeting, March 19, 1963
- I/18 Zetetic Circle, 24th Meeting, April 16, 1963
- I/19 Zetetic Circle, 25th Meeting, May 14, 1963
- I/20 Zetetic Circle, 26th Meeting, December 3, 1963
- I/21 Zetetic Circle, 27th Meeting, February 30, 1968
- I/22 Zetetic Circle, 28th Meeting, May 9, 1968
- I/23 Zetetic Circle, 29th Meeting, March 18, 1969
- I/24 Zetetic Circle, Tykociner lecture, March 18, 1969, "Zetetic approach to Problems of Democracy"
- II. Development of Zetetics
- II.1 Recent Zetetics to Segregate including articles; correspondence with Ben Kowalski on publishing Zetetics manuscripts, 1959
- II.2 "Technical Aids to Zetetics" lecture, 1960 and addition to 2nd Edition of Zetetics
- II.3 Resume of Fundamental Ideas of Zetetics
- II.4 Errata in First Edition
- II.5 Addition to Second Edition
- II.6 Revision of Inventory of Sciences
- II.8 Search for New Words
- II.12 Mathematics Classification
- II.13 Integration of Science, Arts and Religion
- II.14 A4-A6 Relation (Biological and Sociological Sciences), 1960
- II.15 List of Sciences (German Sources)
- II.16 Symbolics of Information Logic
- II.18 "The Relation Between Technology and Symbolics of Information," by Tykociner at the Zetetic Circle, 1960
- II.19 Relation Between A3-A5
- II.20 Universal language
- II.21 Interlingua
- II.22 Tasks in Developing Zetetics, 1956-1959
- II.23 Glossary and Index, c. 1959
- II.24 Mental Experimentation
- II.25 Ideas Requiring Development, 1958
- II.26 Words and Definitions, c. 1958
- II.27 General Education
- II.28 Rules for Extension of Catalogue of Sciences
- II.29 Polemics, 1960
- II.30 Researches influenced by Zetetics, 1960
- II.31 Criticism of Original manuscripts including correspondence Kempner's, 1959
- II.32 Tasks in Developing Zetetics, 1964-1966
- II.33 What is Zetetics, 1965-66

Box 38:

- V.1 Segregate (Zetetics) Prints
- V.3 Outline of Zetetics Handwritten, 1968, part I and part II

- VI.2 Slides for Courses in Zetetics (lecture notes) including list of slides used in lectures, 1949-1966
- VI.3 Courses in Zetetics Public Relations, 1962-1964
- Lecture Notes for 12 lectures including photos from the Chicago Natural History VI.7 Museum, c. 1962
- VI.10 Zetetics Lecture I. 1962
- VI.11 Zetetics Lecture II, 1962
- VI.12 Zetetics Lecture III, 1962
- VI.13 Zetetics Lecture IV, 1962 VI.14 First Discussion Hour, 1962
- VI.15 Zetetics Lecture V, 1962
- VI.16 Zetetics Lecture VI, 1962
- VI.17 Zetetics Lecture VII, 1962
- VI.18 Zetetics Lecture VIII, 1962
- VI.19 Second Discussion Hour, 1962
- VI.20 Zetetics Lecture IX, 1962
- VI.21 Zetetics Lecture X, 1962
- VI.22 Zetetics Lecture XI, 1962
- VI.23 Zetetics Lecture XII, 1962
- VI.24 Zetetics Lecture XIII. 1962
- VI.27 Second Series Student Lists
- VI.28 Second Series Lecture 1, 1963
- VI.29 2, 1963
- VI.30 3, 1963
- VI.31 4, 1963
- VI.32 5, 1963
- VI.33 6, 1963
- VI.34 7, 1963
- VI.35 8, 1963
- VI.36 9, 1963
- VI.37 10, 1963 VI.38 11, 1963
- VI.39 12, 1963
- VI.40 13, Recent Advances and New Tasks, May 14, 1963
- VI.41 14, 1963
- VI.42 15, 1963
- VI.44 Announcement of Zetetics Courses, 1962-1966
- VI.46 Student List and Reactions to Third Series, 1963-1964
- VI.73 Fourth Series, Student List and Reactions, 1964

Box 39:

- VII.3 Notes and Figures, Seminar E. E., November 9, 1960 including Tykociner's lecture before the Joint Meeting of the History of Science Society and the Zetetics Circle, Urbana, April 25, 1962
- VII.12 T. T. Robinson, "Formalism and Intuition in Knowledge and Evolution," 1962
- VII.15 "Zetetics and Areas of Knowledge," presented before a Phi Delta Kappa Symposium, November 4, 1963
- VII.16 Lecture before the History of Science Society and Zetetic Circle, April 25, 1962
- VII.19 Manuscripts and Notes, Address Phi Kappa Phi, 1963 including newspaper photo

- VII.22 Speech Colloquium, "Zetetics and Creativity," 1964
- VII.26 The Institute of Electrical and Electronics Engineers, Inc., Banquet, 1964
- VII.27 National Electronics Conference Award of Merit, Correspondence, 1964 including large photo of Tykociner and Webb (N.A.S.A.)
- VII.28 "Zetetics and the Zetetic System of Knowledge," lecture before Sigma Delta Epsilon Society, 1966, Institute of Radio Engineers
- VII.29 Chicago Section Silver Jubilee, 1950
- VIII.11 Area 11 (Zetetics)
- VII.10 Article relating to different segments of Zetetic Structure
- VIII.11 Area 11 (Zetetics)
- IX.1 Linguistics
- IX.3 Classification of Logic
- IX.4 Information Theory
- IX.7 Correspondence Ben Kowalski, 1963
- IX.9 General Semantics
- IX.10 Zetesis Creativity (Recent Excerpts), c. 1964
- IX.11 Reprints sent by Ben Kowalski on Creativity, 1962
- IX.13 Library Organization (Tykociner's)
- IX.16 Research Center Zetetics

Box 40:

- X.4 Correspondence, Hollywood Museum Associates, 1962
- X.7 Correspondence, Headquarter Aerospace Research, 1961-1962, correspondence with Air Force personnel regarding Zetetics with communication and technical information systems
- X.8 Air University, 1963, correspondence with Col. Lisack Air University, Maxwell AFB, Alabama
- X.10 Correspondence regarding article for <u>The Bridge</u>, 1963
- X.12 Correspondence with faculty members of the University of South Florida, 1962-63
- X.15 Kunz Pamphlets by Tykociner and Kunz on the photoelectric cell
- X.19 Article on Tykociner and Zetetics in the <u>Ingeniorens Ugeblad</u>, 1963 (in Danish) including letter by the author, N. C. Lind
- X.20 National Science Foundation Grant application, 1964
- X.21 Application, Esso Education Foundation, 1966
- X.22 Conference with Professor Von Foerster, 1963
- X.26 E. E. Open House, 1964-1965, 1968
- X.27 Open House, E. E., March, 1966
- X.28 Engineering Open House, 1967
- A.2 Index of articles on research from the <u>Journal of Engineering Education</u>, 1929-1957
- A.3 Correspondence, 1956-1961, including members of USAF research areas interest in Zetetics
- A.4 Chronology significant steps (plans for May and June, 1953)
- A.7 Quarterly Journal on Zetetics (1956)
- A.10 Copyrights, 1959-1967, including correspondence
- B.1 Notes on Zetetics to be filed
- B.2 T. T. Robinson's paper on the Structure of A₁, 1960
- B.3 T. T. Robinson's paper on Deductive Methods, 1961
- B.4 Notes on Robinson's Deductive Systems and the growth of science

- B.5 Table of Systematized Knowledge, c. 1961
- B.6 Guide for the Preparation and Publication of Synopses, c. 1960
- B.7 Report of the Subcommittee on Laboratories to the Curriculum Committee, 1961
- B.8 Request made of the Academic Staff to prepare a publication list, 1961, including Tykociner's list for 1960
- B.9 Meet the Press, "Commission on National Goals," 1960
- B.10 Diagram From Axioms Through deduction to application, no date
- B.11 Lessa, W. A., "Somatomancy Precursor of the Science of Human Constitution," 1952
- B.12 Notes for Gamma Sigma Delta Seminar, 1961
- B.13 Professor Ashby's course outline for "Fundamentals of Cybernetics," 1961, University of Illinois
- B.14 Systematization of Knowledge Definition of Knowledge, March, 1961, including Promotional piece on Professor Ashby's Zetetic Circle lecture on "The Nature of Creative Thinking," c. 1961
- B.15 Diagram The Growth of Culture, March, 1961
- B.16 Notes and Thoughts induced by <u>Science</u>, 1961
- B.17 Information and Articles of Interest in <u>Science</u>, 1961
- B.18 The Areas of Knowledge and Their Basic Sciences, c. 1961
- B.19 Definition of Area 1
- B.20 "A Kinematic Model of Interrelations Between the Areas of Systematized Knowledge"
- B.21 "Some Thoughts on Zetetics," by T. T. Robinson
- B.22 Completeness, consistency and Decidability in a Transducer (function)
- B.23 Charts: Effect of Expanding Population, 1960
- B.24 Lecture before Zetetics Circle, "Research as a Science and Social Evolution"
- B.25 Diagram for concept of "Formalization" and its "degree"
- B.26 Interrelations of science in A1 (based on degree of systematization)
- B.27 Linguistics, Discussion with Dr. Kahane, April 1961
- B.28 A.1 Symbolics of Information
- B.29 Conference with Dr. W. Ross Ashby, May 1961, including "The Nature of 'Creative Thinking," by Dr. Ashby, March 1961
- B.30 The Crisis in Mathematics: Summary
- B.31 Outline: Philosophical Orientation with Regard to A1
- B.32 Letter from W. H. Huff, Serials Librarian (University of Illinois) to Tykociner, May 1961
- B.33 Abilities, Their limitation and their extension by instruments and machines
- B.34 Method of establishing Zetetics tables
- B.35 Pacifics Suggestion for preparing for peace by Shapley
- B.36 Notes on Area 8 Social Cybernetics: its Basics and Indicators
- B.37 International Encyclopedia of Unified Science: Table of Contents
- B.38 Abnormal Psychology; Review in Science, 1961
- B.39 Technological Aids to Zetesis, 1960
- B.40 Reference Tables in Set Theory
- B.41 Lectures on the Philosophy of Mathematics, by Shaw, J.B., 1918
- B.42 On the Sequence of basic sciences in Area A1
- B.43 Amperes and the Birth of Electrodynamics
- B.44 Excerpts from Isaac Newton, biography by More, L.T., 1934
- B.45 George Bernard Shaw, by Henderson, A., 1956
- B.46 Correction of lecture, Evolution, History and Zetetics
- B.47 Excerpts from Scientific Information Notes, National Science Foundation, 1962
- B.48 The Measurement of Cultural Levels
- B.49 Quotations for Future Use

- B.50 Procedures and Metaphysics, Strong, E.W., 1936
- B.51 Letter, Tykociner to the Historian of Science, London Museum, London, England, 1962
- B.52 Letter, Professor Calvin W. Taylor, University of Utah, to Tykociner, 1962
- B.53 Research Statistics for the U.S.: A. Scientists and Engineers in K and D including supporting personnel
- B.54 Growth of knowledge in various areas
- B.55 Fein, L., 1960, "The Computer-Related Sciences (Synnoetics) at a University in the year 1975"

Box 41:

- C.1 Newspaper clippings about Zetetics, 1960
- C.3 Essay on Democracy, 1948-1950
- C.4 Manuscript and copy of lecture given at Dedication Ceremony of E.E. Building, May 21. 1949: "Development of a Research Philosophy and the Science of Research"
- C.6 Manuscript of lecture (C4) prepared as an article for <u>Scientific Monthly</u>, 1950-1953
- C.7 Same Manuscript prepared as an article for Philosophy of Science, 1950
- C.8 "Research and the Extension of the Scientific Method," lecture given in 1953 to E.E. Seminar
- C.9 Essay on Democracy, to be revised
- C.10 Lecture by Tykociner in Professor Clark's class, November 1955 on history of X-Ray discoveries
- C.12 "Research as a Science," presented before the Urbana Chapter of the History of Science Society, 1956
- C.13 Announcement of "Research as a Science" given before the Mechanics Club, 1956
- C.15 "Systemization and Selection of Problems in Research," given to E.E. Seminar, 1956
- C.16 "Research as a Science," lecture given in Dr. Leonard Yntema's home, 1956, including correspondence with Dr. Douwe Yntema, MIT
- C.18 Definitions of Science for Dictionary of Science, 1956
- C.19 Extension of lectures into booklet, 1956
- C.20 "Research as a Science," abridged for Broadcasting for WILL," 1956
- C.21 "Reminiscences and thoughts of Science, Research, Zetetics and Religion" given before Baha'i Group, Urbana, 1937, including photo of Bahai House, Wilmette, Illinois
- C.22 Manuscript material prepared for Atlantic Monthly, 1957
- C.23 "Systematization and Selection of Problems in Research," 1958
- C.24 Broadcast on Zetetics for Mosaic, 1959
- C.25 Interview Notes for proposed broadcast for WILL, October 1961
- D. Bibliography Pacifics (Material of Boris Gaurevich nominated for Nobel Peace Prize, 1957
- E. Excerpt
- E.2 Definition, Classification of Unity of Science
- E.3 Functional Character of Research
- E.5 Creative Thinking
- E.6 Abilities
- E.7 Planning of Research
- E.8 Education for Research
- E.9 Art and Zetetics
- E.10 Humanity and Zetetics
- E.11 Interdependence of Problems, May 15, 1969

Box 43:

- 1. Zetetic Center Proposals and Correspondence, 1964-1965
- 2. Correspondence President Frederick Seitz, National Academy of Science, 1964-1965
- 3. Correspondence Dr. James Webb to N.A.S.A., 1965, 1968
- 4. Correspondence Professor Walter Rose, 1964-1969
- 5. Correspondence Robert B. Carlson, 1964
- 6. Steven Fischer taxiology Psychology and letters of recommendation, 1969
- 9. Correspondence World Resources Inventory, R.B. Fuller, 1964-1965; 1968
- 10. Correspondence Rex C. Parmalee, 1961-1964
- 12. Correspondence Joe Clifford (Bendix), 1965
- 14. Correspondence W.S. Taylor (Arlington), 1964
- 18. Circular Zetetics Institute
- 16. Correspondence L.P. Morris, 1964-1968
- 17. Correspondence Erwin A. Esper, 1965-1969
- 18. Correspondence Professor Z. Krzywoblock, 1965
- 19. Jerome C. Metzger Education Indiana University, 1969, correspondence
- 20. Correspondence on Tykociner's Honorary Degree, University of Illinois, 1965, including Honorary Citation
- 26. Social Ethics and Humanism
- 28. "Morphology" of gaseous Electrical Discharge
- 29. Correspondence Prospective Students, 1965-1966
- 30. Mrs. Elinore Olson (Portland), 1965-1966
- 31. Building for Zetetics Institute (designed by Peter Smith)
- 32. Correspondence Retrieval of Information, W.M. Mazer, 1965
- 35. Correspondence Gisela Heilpern, 1963-1969
- 41. Correspondence Frieda Stute, 1965-1967
- 44. Dr. Philip M. Hanser, World Population Problems, 1965
- 45. Gilbert Lorenz, Heuristics, 1962
- 46. Correspondence, David Ruhe and Margaret Kunz Ruhe, and Article for World Order, 1958-1967
- 53. Correspondence, Louis R. Bloom, 1956-1964
- 55. Correspondence, Alexander Macriff, 1966-1969
- 56. Examination Questions, 1964-1968
- 57. Correspondence regarding Book on the History of E.E. College, 1966 Chapter on Tykociner
- 59. National Institute for Scientific Information, Dr. J. Neal, 1965-1966
- 61. Correspondence, Millimeter Wave Research, 1964
- 62. National Science Foundation, Proposal Phase II, 1966

Box 44:

- 63. Correspondence, Battelle Memorial Institute, 1965-1966
- 64. Correspondence, Battelle Memorial Institute, 1951-1953
- 65. Conferences on Zetetics, 1964
- 66. J.L. Simon (Department of Advertising, University of Illinois), 1964
- 67. Correspondence Inquiries to orders, re: Zetetics Copies, 1964-1969
- 68. Information of Projects Similar to Zetetics
- 72. Secretarial Information
- 74. Correspondence, Professor Raymond C. Murray, University of N.C., 1966

- 75. Correspondence, V.K. Zworykin, 1966-1967
- 76. Prospects Assistantships
- 78. Term Papers Zetetics Course, Spring, 1966
- 79. Correspondence with <u>Scientific American</u> regarding Zetetics article, 1966
- 80. Polish Academy of Science, 1966 (in Polish)

 Correspondence with the Polish Academy of Sciences asking for Tykociner's publications on Zetetics
- 81. Kingery's article on Joseph T. Tykociner, 1967
- 82. Correspondence, B.F. Goldstein, Chicago, 1966
- 84. Correspondence, Students and Friends of Zetetics, 1966-1969
- 85. Correspondence, Dr. Adolf Sturmthal, 1938, 1950, 1961-1966
- 86. Correspondence, Virginia Wells, 1966-1969
- 90. Correspondence, McGraw-Hill, 1966-1967
- 91. Correspondence, Joan (Nathan) and David Karlin, 1966-1969
- 92. Former Students in Zetetics, 1961-1969 including correspondence; tests, administrative work
- 93. Correspondence, J.S.J. Heabil, General Research Company, 1967
- 96. American Men of Science and other biographical notes for Directories, 1967
- 97. Lecture, University Bahai Group, 1967
- 98. Slides for Open House, E.E.
- 100. WILL Television Interview, May 23, 1967
- 101. WILL Broadcast, 1956
- 102. "Showcase" interview of Tykociner, WILL TV, 1963
- 103. TV appearance, 1960
- 104. Persons and Institutions Interested in Zetetics, 1964-1967
- 106. Membership Directories (The Institute of Electrical and Electronics Engineers, Inc.), 1967
- 107. Correspondence, Jerry Walton, 1967
- 108. Knowledge Processing, Dr. James P. Neal and Dr. M. Babcock, 1967-1968
- 111. Correspondence, G.H. Cooper, Canada, 1967
- 112. Form letter from University of Illinois Archives asking for Publications, 1967
- 113. Article on Pure and Applied Research, 1967
- 115. Correspondence Pacifics as a Science, 1967-1968
- 116. Human Aspirations as a Science, 1964-1968
- 117. Manuscript of article for Saturday Review, "The Need for Expansion and Synthesis of Human Knowledge," 1967-1968, including correspondence with Virginia Wells
- 119. Correspondence, Dr. Goldhaber, 1967
- 120. Correspondence, Tokyo University of Education, Professor Kaneko, 1967
- 121. Correspondence, Dr. W. Mikulski, 1967-1968 (in Polish)

 Birthday greetings. Congratulations on Tykociner's new research work (no name mentioned); and a letter from Barbara Mikulski, Witdd Mikulski's wife, for the same reason
 - 1/1/68 Personal He mentions teaching "zetetics" at the University of

Maryland

Box 45:

- 123. Zetetics Institute, 1968
- 124. Professor Mulvihill, Kent State University, 1968
- 125. "Principles of Zetetics," lecture at the Physics Society, 1967
- 126. Research on Research, Northwestern University, 1968
- 127. Zetetics lecture at "Teach Across," 1968

129. "Zetetics and its Relation to Education and Research," given at the Centennial Symposium, 1967

- 130. Central Facility for Electron Microscopy, 1968
- 131. Visit to the Gaseous Electronic Laboratory, 1965
- 132. <u>Saturday Review</u>, Joseph T. Tykociner and Sound Movies, 1968 including interesting letter by Tykociner on Zetetics, 1968
- 133. Listing of Zetetic Course in University Catalog, 1968
- 134. "Zetetics and its Role in Selecting and Carrying on One's Life Work," given at Students Senate Freshman Seminar, 1968
- 135. Lecture on Zetetics to Professor Offner's M.E. Class, 1969
- 136. Liberal Arts College, 1969
- 137. Dr. Bruce J. Noble, Director, Human Energy Research Laboratory, University of Pittsburgh, 1968
- 138. "Zetetics and the Awareness of the Foremost Problems facing Humanity," given in Professor Van Groenou's class, 1968
- 139. Tape Recording on Zetetics, Miss Gay Schlachter, May 13, 1968
- 140. Architectural Description of Zetetics Institute, 1968 including photo of model and photos of plans
- 143. Project Conference for Realization of a Zetetics Institute
- 144. Project for an Institute of Zetetics, 1965
- 145. Correspondence, D.P. Kapitza, 1968
- 147. Project 500, 1968
- 148. George C. Schumacher Master's Thesis, 1968
- 150. Correspondence, Tuttle Publishing Co., Tokyo, Japan, 1968
- 151. Conference on Zetetics with Dean Dunker, 3/11/69 including History of Zetetics developed by Tykociner; Possibility of forming M.A. and Ph.D in Zetetics an Institute for Zetetics
- 153. General Systems Correspondence, 1969 including correspondence with various members of the Society for General Systems Research
- 154. Account Joseph T. Tykociner's Publications on Zetetics, 1961-1968 including Accountancy of cash received for publications written; and cost paid by Joseph T. Tykociner for staff salary; supplies; book purchases
- 155. Eugene Rabinowitch, Editor correspondence with Dr. Rabinowitch, 1962-1968
- 156. Enviriculture Horsbrugh Notre Dame, 1968 including correspondence Professor Horsbrugh University of Notre Dame
- 158. Zetetics Report of 1968 including enrollment figures, 1962-1969, <u>Zetetics and its Relation</u> to Education and Research, 1968, Dean Drucker Conference, 1969
- 160. Zetetics Approach to Problems of Democracy, manuscripts, correspondence, literature
- 161. Courier article on Zetetics, January 7, 1969 including photo of Tykociner, 1969
- 162. Manuscript, "Zetetics and Choice of Vocation," discussion, Zetetics class, Fall, 1968
- 163. Announcement Zetetics Courses, Fall, 1968
- 164. Leaflet on Zetetics, 1969
- 165. Leaflet on Zetetics Courses, Spring, 1969
- 166. "A Proposal", Fred Stahl, c. 1967
- 167. Itinerary for U.S.S.R. Mission
- 168. Notes on New Biology, 1962
- 169. Notes on William Sargent's, "Battle for the Mind," no date
- 170. Bibliography from Science and Nature, c. 1962
- 171. Zeteotopia, Utopia, 1969
- 172. Lecture on Zetetics to Industrial Social Systems Class, 1968
- 173. Correspondence, David Lyle and NEA Spec, 1969

- 174. Correspondence, Maynard Brichford, 1964
- 175. Correspondence and Publications, Y. Drer, Hebrew University of Jerusalem, 1968

Box 46:

- 176. World University proposed by A.R. Nilsen, Denmark, 1953
- 177. History of Science Society, Officers and Lectures, 1953-1964
- 178. Correspondence and Material from Bell Telephone, 1962
- 179. Material from the U.S. Bureau of Standards, 1962
- 180. Papers presented at the Education and Structure of Knowledge Symposium, University of Illinois, 1963
- 181. Organization of the Fields of Psychology
- 182. The Weizmann Institute of Science
- 183. Gilbert Lorenz, "A Program for the Promotion of Zetetics"
- 184. Publications

Cannon, Dr. W.B., "The Role of Change in Discovery," 1940

Dedijer, S., "International Comparisons of Science," 1964

"The Science of Science," 1963

Emch, A.F., "Control Means Action," 1954

Macgowasi, K., "Behind the Screen; The History and Techniques of the Motion Picture"

Merritt, R.L., "Systems and the Disintegration of Empires"

National Library, Documents Digest

Reiser, O.L., "Matter, Anti-Matter and Cosmic Symmetry," 1956

"Postulation for an Ethics on Belief in Science, Religion and Philosophy," 1956

Social Science Research Council, "Annual Report; 1954-1955"

Stake, R.E., "The Countenance of Educational Evaluation"

Tagliaconzzo, G., "Taxonomy of Knowledge," 1960

Taylor, E.W. and Barron, F., eds., "Scientific Creativity: Its Recognition and

Development," 1963

Von Foerster, H., "The Realization of Biological Computers," 1959

185. The General Electric Forum, 1967

Box 47:

Slides and Negative Plates and Zetetic Program Tapes, Handle with Care

- Box 1 Zetetics lecture slides shown at dedication of Electrical Engineering Building, May 21,
- Box 2 Slides for Paper on "Zetetics," 1953-1956

Individual slides

- 1) Stages in the Development of knowledge
- 2) Growth of Knowledge
- 3) Diagram of Knowledge into regions and areas
- 4) Diagram of Knowledge into regions and areas
- 5) Relation of Zetetics to other sciences
- 6) Function of areas of knowledge

Cross Reference Sheet on Life span of scientists, sequence of discoveries

List of (negative) slides prepared and used for lectures on zetetics, 1949-1966

Negatives of slides, 1-153

Box #1 - Zetetics, Problem list #1, November 1956

Box #2 - Problem list #2, December, 1956 Box #3, Problem list #3, November 1956 Master Program Tape, November 1956

Box 48:

Duplicate Copies of Tykociner Publications

Box OS-26:

Oversize Photostats of New York World article, 1922