

History of Rocketry and Astronautics

**Proceedings of the Fiftieth History Symposium of
the International Academy of Astronautics**

Guadalajara, Mexico, 2016

Pablo de León, Volume Editor

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AAS History Series, Volume 48

A Supplement to Advances in the Astronautical Sciences

IAA History Symposia, Volume 36

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AMERICAN ASTRONAUTICAL SOCIETY

AAS Publications Office
P.O. Box 28130
San Diego, California 92198

Affiliated with the American Association for the Advancement of Science
Member of the International Astronautical Federation

First Printing 2017

ISSN 0730-3564

ISBN 978-0-87703-641-8 (Hard Cover)

ISBN 978-0-87703-642-5 (Soft Cover)

Published for the American Astronautical Society
by Univelt, Incorporated, P.O. Box 28130, San Diego, California 92198
Web Site: <http://www.univelt.com>

Printed and Bound in the U.S.A.

Chapter 7

Austrian Society for the Advancement of Space Exploration—“Österreichische Gesellschaft zur Förderung der Raumforschung”—1931–1938*

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Abstract

The Austrian Society for the Advancement of Space Exploration (Österreichische Gesellschaft zur Förderung der Raumforschung) was established in May 1931 and existed until 1938. It is merely not known today. Its registration documents, statutes, and liquidation documents give some information. This society is connected to Franz J. Kareis, who should have launched a liquid fuel mail rocket in May 1932.

I. Introduction

In addition to the two, better-known, former Austrian space travel associations, the Wissenschaftliche Gesellschaft für Höhenforschung (Scientific Society for Altitude Research), and the Gesellschaft für Raketentechnik (Austrian Society for Rocket Technology), a third, previously mostly unknown space travel society, the Österreichische Gesellschaft zur Förderung der Raumforschung (Austrian

* Presented at the Fiftieth History Symposium of the International Academy of Astronautics, 26–30 October 2016, Guadalajara, Mexico. Paper IAC-16-E4.1.8.

† Hermann-Oberth-Raumfahrt-Museum, Feucht, Germany.

Society for the Promotion of Space Research), was founded on April 18, 1931. The latter can only be correctly categorized when compared to the two former societies.

II. Comparison of Early Austrian “Rocket” Societies

Scientific Society for Altitude Research

As generally known, the Austrian *Scientific Society for Altitude Research* was founded in Vienna on January, 22 1927. According to the signatories of its statutes, the management board was composed as follows: First Chairman Dr. Franz von Hoefft,¹ (*April 5, 1882, in Vienna—+ December 13, 1954, in Linz),² and Secretary Ing. Guido Pirquet.³

The society was founded to bring together and organize anyone interested in this subject matter—above all scientists—from Austria and abroad.

The society appeared in public for the first time when publishing a full-page technical article, “Can Man Leave Earth?” (original German title: “Kann der Mensch die Erde verlassen?”) by Ing. Pirquet in Reichspost (Reich Mail Service) (p. 18–19) on January 1, 1928.⁴ Numerous articles were to follow. Erich Dolezal reported that the society was present at the air traffic society exhibition at the Viennese Fair for Reichspost with a small stand on March 15, 1928, (p. 6).⁵ Dr. Franz von Hoefft and Ing. Guido Pirquet also gave several public lectures throughout Austria.

List of known lectures held (only Scientific Society for Altitude Research):
Dr. Franz von Hoefft (all held in Vienna)

February 9, 1928⁶

Association of German-Austrian Engineers, Vienna
“The Possibilities of Space Flights Using Rockets”

March 23, 1928⁷

Austrian Airline, Vienna
“Traveling into Space (with Today’s Technology)”

April 4, 1928⁸

Women’s Alliance for the Strengthening of Austria
“Spaceship to the Moon with Photographs”

February 7, 1929⁹

Scientific Club, Vienna
“News on the Rocket Problem—with Photographs”

April 17, 1929¹⁰

Adult Education Centre Brigittenau, Brigittenau
“News on the Question of Space Travel”

Ing. Guido Pirquet

June 13, 1928¹¹

Vorarlberg Techn. Association, Bregenz
“The Possibility of Space Travel with Photographs”

June 25, 1928¹²

Austrian Inventors' Association, Innsbruck
“The Possibility of Space Travel with Photographs”

April 18, 1929¹³

Catholic Further Education Association Reunion
“The Possibility of Space Travel,” Vienna

Dr. Robert Klumak (astronomer, Urania, Vienna)

all at Urania Vienna

“The Problem of Space Travel with Photographs”

September 2, 1929 (Part 1)¹⁴

September 9, 1929 (Part 2)¹⁵

September 16, 1929 (Part 3)¹⁶

Technical differences with Dr. Franz von Hoefft caused Guido Pirquet to leave the society at the beginning of 1929, and Dr. Franz von Hoefft also left due to internal differences on May 18, 1931.

Following the death of his widowed mother (Amalie Hoefft, née Walcher + January 1, 1932, in Vienna), Dr. Franz von Hoefft married his second wife, Helene Hohegger in Vienna on April 24, 1932, and moved from Vienna, II, Darwingasse 34, to Linz, Sandgasse 24, on April 16, 1932.^{17,18}

He was interviewed on the current situation of the society by the Police Directorate of Linz on January 10, 1933, and testified:¹⁹

Chairman: Dr. Franz von Hoefft

Vice-Chairman: Dr. Robert Klumak, Director of the Observatory of Urania,
Vienna I, Aspernplatz 1.

Secretary: Heinrich König, Vienna I., Schottenring 15, c/o Ms. Lemberger

Board members: Ing. Jung, Association of Austrian Engineers, Editor,
Erich Doleschal (Reichspost), Vienna II Böklinstrasse,
Taller-Schirndingen Baroness, Vienna VII, Westbahnstrasse

Due to internal differences, I resigned from my position as chairman and terminated my membership by submitting a registered letter to the Vice-Chairman, Dr. Robert Klumak, Vienna XIX. Weimarerstrasse Nr. 89, on May 18, 1931; at the same time, I would like to inform you that all records are held in trust by the Secretary, Heinrich König; any remaining materials could possibly be found with the former secretary and co-proponent Ing.

Guido Pirquet, Wien, Windmühlgasse; Ing. Pirquet resigned from his position at the beginning of 1929.—The society only had few members in spring 1931 and hardly developed any activities beyond my personal work.

Moreover, von Hoeffft wrote the following on Werner Brügel's *Men of the Rocket* (original German title: *Männer der Rakete*), published in 1934:²⁰

At the same time, the foundation of the Scientific Society for Altitude Research was being prepared and then also abandoned in 1930 as it proved an unsuitable means to get to the necessary large-scale tests.

As a result, the society was dissolved in autumn 1932, due to a lack of paying association members according to Dr. Robert Klumak (February 27, 1933). The society was deleted from the register of associations on February 3, 1933.²¹

Thus, according to Dr. Franz von Hoeffft, there was no active space travel association in Austria at the beginning of 1931, but several people actively dealt with this issue.

Austrian Society for Rocket Technology

This led to the foundation of a new society, the Österreichische Gesellschaft für Raketentechnik (Austrian Society for Rocket Technology) (Vienna III, Traugasse 11) on April 9, 1931, by the members of a preparatory committee of the Österreichische Erfinderverband (Austrian Inventors' Association) and the Österreichische Flugtechnische Verein (Austrian Aeronautical Association) during the exhibition of the Oberth test rocket at the Viennese Spring Fair of the Austrian Inventors' Association.²²

The society pursued the objective of scientific and practical work in the field of rocket engineering. Its statutes stipulate the following:²³

Sect. 2 Purpose of the Society

The purpose of the Society is the promotion of theoretical and practical development of rocketry in Austria and the support of any rocketry-related activities and tests of any type in order to promote this special type of travel on the basis of the progress achieved.

Sect. 3 Means to achieve the purpose of the Society:

- a) Organization of lectures and rocket engineering discussions, presentations, tests and competitions;
- b) Theoretical and experimental processing of questions concerning the subject of rocket engineering;
- c) Promotion of the journal "Flug" published monthly as official body of the society or publication of a journal of its own or other publications;
- d) Establishment of a fund for the implementation of theoretical and practical work in the field, creation of a specialist library, establishment or use of workshops and airfields, building of a collection of slides and films as well as invitations to compete for awards to obtain technical proposals.

- e) Presentation of models and other work results in suitable places in connection with rocket launches for show purposes or for reaching certain destinations.
- f) Exhibition of models and other rocket engineering and research results, either at own events open to the public or as part of other exhibitions,
- g) Sending delegations to exhibitions and rocket engineering events;
- h) Formation of a permanent technical consultative committee granting special rights to the executive board such as the drafting of expert reports for public or private purposes on behalf of the Society, the examination of projects, inventions, instruments etc. submitted, in which case the reports shall be forwarded by the executive committee of the Society.
- i) Formation of sections in the individual Federal Länder and cooperation with foreign corporations with corresponding fields of work in the respectively appropriate form;
- j) Foundation of scientific societies for the promotion of the Society's purpose in accordance with statutory provisions and participation of the Society as legal entity in start-ups and other commercial and industrial ventures;
- k) Application of any legal means deemed appropriate. The Society does not pursue gains of profit of a material nature.

The executive board of the Society consists of the following members:²⁴

- President Hanns Pittner, Austrian Aeronautical Association.
- President Friedrich Krauss, Austrian Inventors' Association.
- Ing. Guido von Pirquet.

Further members of the executive board were:

- Mr. Fritz Bistritschan, Member of the Executive Board of the Austrian Aeronautical Association.
- Mr. Ing. Dr. techn. Franz Kuba, Assistant of the Technical University.
- Mr. Baurat Ing. Hermann Stolfa, Member of the Executive Board of the Austrian Inventors' Association.
- Mr. Franz Thomanek jun.
- Mr. Ing. Rudolf Zwerina.

The constituent meeting elected Mr. Prof. Hermann Oberth as Honorary President of the Society.

The field of work was announced to invited representatives of numerous corporations in the library hall of the Austrian Aeronautical Association on April 16.—Mr. Ing. Guido von Pirquet held an introductory lecture "Introduction to the Problems of Space Travel". Mr. Ing. Rudolf Zwerina developed the next working program on behalf of the trial projects management group:

Theoretical part: Weekly discussion evenings, every Thursday at 6pm in the library hall of the Aeronautical Association.

Practical part: Examination of the jet device, construction of register rockets and preparatory work for the subsequent mail rockets and long-distance rockets.

Austrian Society for the Promotion of Space Research

However, it had not been known at the time that²⁵ the Österreichische Gesellschaft zur Förderung der Raumforschung (Austrian Society for the Promotion of Space Research) was to be founded only a few days later on April 18, 1931.

The proponent committee (founding committee) submitted its request to found the Austrian Society for the Promotion of Space Research, including its statutes to the Viennese Provincial Government, Association Department, on April 13, 1931.

The committee consisted of the following members:

- Anton Leithner, chemist, Vienna XIV. Ullmannstrasse 8
- Dr. August Diglas, St. Andrä-Wördern
- Fritz Herdlitzka, Lt.a.D., officer, Stammersdorf, Jedlersdorferstrasse 16
- Rudolf Kowarik, accountant, Vienna VIII., Loidoldgasse 4
- Alfred Hotwagner, merchant, Vienna VIII., Daungasse 4

Anton Leithner stated p.p. "Jung-christlichsoziale Bewegung." Vienna I, Herrengasse 2, as address of the proponent committee.²⁶

The statutes provide the following information on the purpose of the association and the means to achieve its purpose.²⁷

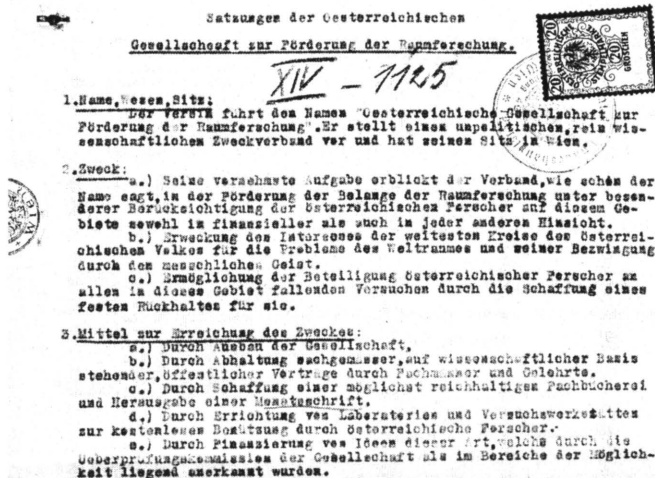


Figure 7-1: Excerpt from the first page of the Society's statutes.*

* Austrian State Archive, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125, Statues April 18, 1931.

2. Purpose:
 - a.) As its name indicates, the major task of the association shall be the promotion of the interests of space research in financial and any other respects, giving special attention to Austrian scientists in this field.
 - b.) It shall also attract the interests of the wider Austrian public in the problems of outer space and its conquest by the human spirit.
 - c.) Facilitation of the participation of Austrian scientists in any tests in this area by means of providing reliable support.
3. Means to achieve its purpose:
 - a.) Expansion of the Society,
 - b.) Holding of appropriate, science-based public lectures by experts and scholars.
 - c.) Creation of a comprehensive specialist library and publication of a monthly journal.
 - d.) Establishment of laboratories and test workshops for free use by Austrian researchers.
 - e.) Financing of ideas of this type recognized as feasible by the review commission of the Society.

The founding meeting of the Austrian Society for the Promotion of Space Research was held at Kaffee-Restaurant Lang in the 8th District of Vienna, Langegasse 63, on July 2, 1931, and ended with the following resolutions:²⁸

1. Registered office of the Society: Vienna XVIII., Michaelerstrasse 16/8
Franz Kareis, machine technician, rocket designer
2. The following office-holders were elected for the current association year 1931/1932:
Chairman: Franz Kareis, machine technician, rocket designer, Vienna XVIII., Michaelerstrasse 16/8
Vice-Chairman: Anton Leithner, chemist, Vienna XIV. Ullmannstrasse 8
Secretary and Treasurer: Rudolf Kowarik, accountant, Vienna VIII., Loidoldgasse 4
Legal Adviser: Dr. August Diglas, St. Andrä-Wördern.
Presiding Review Commissioner: Fritz Herdlitzka, Lt.a.D., Stammersdorf
Statistical Manager: Alfred Hotwagner, Vienna VIII., Daugasse 4
Bulletin Editor: Ing. Fritz Umschaden, Vienna IX, Müllnergasse 6/5
The membership fee was fixed at 12 schilling per year.

The District Police Inspectorate Vienna XVIII received this information one day after the constituent meeting by letter dated July 3, 1931.

ÖSTERREICHISCHE GESELLSCHAFT
ZUR FÖRDERUNG DER RAUMFORSCHUNG

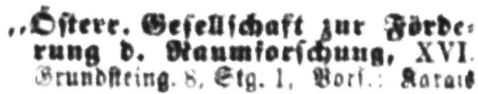
Oesterreichische Gesellschaft
zur
Förderung der Raumforschung

Figures 7–2 and 7–3: Part of the letterhead and Society stamp.*

The records do not show the relation between the members of the proponent committee. However, it is noteworthy that all of them held offices within the executive board.

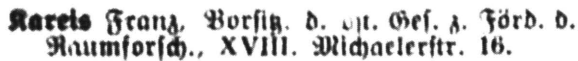
According to a letter to the District Police Inspectorate Vienna XVIII dated February 2, 1932, Franz Kareis left the Society in autumn 1931, as stated by himself.²⁹

However, it is interesting that Adolph Lehmann's General Address Book of Vienna lists him in the years from 1932 until 1938.³⁰



„Österr. Gesellschaft zur Förde-
rung d. Raumforschung, XVI.
Brundsteing. 8, Stg. 1, Vorf.: Kareis

Figure 7–4: Entry of the Society in Adolph Lehmann's General Address Book 1932.†



Kareis Franz, Vorfig. d. vjt. Ges. z. Förd. d.
Raumforsch., XVIII. Michaelerstr. 16.

Figure 7–5: Entry of Kareis in Adolph Lehmann's General Address Book 1932.‡

Attorney Emil Karl Hait, Vienna 1. Elisabethstrasse 26, inquired with the Police Directorate Vienna I, Schottenring 23, Association Department, on June 14, 1932, as to whether Mr. Josef Bauer and Mr. Anton Leithner were members of the executive board of the Austrian Society for the Promotion of Space Research, Vienna XVI., Ottakringerstrasse 219, and whether they were authorized to sign according to the Society's statutes.³¹

* Austrian State Archive, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125, Statues April 18, 1931.

† Vienna digital library, <http://www.digital.wienbibliothek.at>, Adolph Lehmann's General Address Book of Vienna, Vol. 2, 5. Authorities, Public and Private Institutes, ..., 3. Associations, 1932, p. 168.

‡ Vienna digital library, <http://www.digital.wienbibliothek.at>, Adolph Lehmann's General Address Book of Vienna, Vol. 1, 1st Part. Inhabitants of Vienna, 1932, p. 734.

The attorney received the desired information in the reply letter dated June 18, 1932. According to this reply, the executive board was comprised as follows at the time:³²

- Chairman: vacant
- Vice-Chairman: Anton Leithner, Vienna XIV. Ullmannstrasse 8
- Secretary and Treasurer: Rudolf Kowarik, Vienna VIII. Loidoldgasse 4
- Legal Adviser: Dr. August Diglas, St. Andrä-Wördern.
- President Review Commissioner: Fritz Herdlitzka, Lt.a.D., Stammersdorf.

This shows that there were no changes of the executive board, except for the resignation of the Chairman, Franz Kareis, whose position had not been filled at that point in time.

For the address of the Society stated by attorney Haid – Vienna XVI., Ottakringerstrasse 210 – not 219 as indicated – Adolph Lehmann’s General Address Book of 1932, Vol. 1, in its directory section – Inhabitants of Vienna – Alphabetical Directory of Inhabitants on page 64 contains an entry for a certain merchant Josef Bauer in. The facts relating to Josef Bauer and his role remain unknown.³³

By letter dated November 30, 1939,³⁴ the State Administration of the Reichsgau Vienna, Ref. I/6, informed the last Chairman Mr. Anton Leithner, XIV. Ullmannstrasse 8, that

“The Society for the Promotion of Space Research is hereby dissolved ex officio upon application of the Liquidation Commissioner for Societies, Organizations and Associations appointed by the Reich Commissioner for the Reunification of Austria with the German Reich pursuant to Section 3 of the Law on the Transition and Integration of Societies, Organizations and Associations dated May 17, 1938, Journal of Laws I for the Country of Austria No. 136/38.”

It is inadmissible to further maintain the organizational relationship between the members of the society hereby dissolved...”

“Any assets shall be forfeited under exclusion of liquidation at
1 50% to the benefit of the Liquidation Commissioner for Societies, Organizations and Associations, in trust of Aufbaufondsvermögensverwaltungs-Ges. m. b. H. Vienna I, An der Hülben 4;
2 50% to the benefit of the NSDAP Gau Vienna.

This dissolution notification shall not require any further justification of the statutory provisions stated under Sect. 1 and is unappealable. p.p. Dr. Heilsberg, Superior Councilor.”

This hectographed letter leading to the abolishment of all Austrian societies and the like surprisingly contains the note “for filing” as can be inferred from the stamp of the Police President upon receipt on May 23, 1941, and second date stamp of June 4, 1941. Another internal document, the final report,³⁵ again a hec-

tographed form³⁶ date-stamped March 4, bears the handwritten entry “active” in the section “active, deleted, dissolved” by notification. The society ceased to exist with the notification³⁷ sent to Anton Leithner dated May 22, 1941.

The Austrian Scientific Society for Altitude Research published in journals and magazines, held public lectures, also participated in the Viennese Fair in 1928. The same is true for the Austrian Society for Rocket Technology, whose members also performed tests and published their results and association news as a legal entity in the journal *Flug*, however, there is hardly any information of any such activities for the Austrian Society for the Promotion of Space Research.

To this day, no copies of an internal society bulletin, for which Ing. Fritz Umschaden was responsible, are to be found. There is also only one official letter of the society—that concerning its founding meeting on July 3, 1931, sent to the District Police Inspectorate.



Figure 7–6: Membership card of Dr. Ing. Walter Hohmann, Essen, as a member of honor.*

III. Contribution to Space Research and Rocket Engineering

The Second Chairman of the Society for Space Travel in Berlin, Willy Ley, knew about the existence of the Austrian Society for the Promotion of Space Research. In a letter dated June 7, 1931, addressed to the Austrian Society, the Society for Space Travel wrote that it performed the successful flight of a liquid-propellant rocket.

Franz Kareis, having received and read the letter, sent the following reply on a private letterhead:³⁸

Ladies and Gentlemen!

In my capacity as executive member of the Austrian Society for the Promotion of Space Research, I received and read your highly appreciated letter

* The Hohmann family estate provided by Dr. Wolfgang Both.

dated June 7, and I will take the liberty of informing you about the following:

You are not the only one who designed liquid-propellant rockets and believes to be first to have done so; I also launched my first liquid-propellant rocket approximately one year ago and managed to complete my liquid-propellant rocket number 2 using a self-designed test station with an improved support and a simple design which will be officially launched as soon as official permission has been granted.

This shows that we are also working with great enthusiasm and tenacious perseverance in Austria. Although I have worked up to now solely with my assistant, Ms. Dr. Grosser, and without pecuniary assistance from third parties, I have achieved quite agreeable results.

Concerning your attitude (dislike) for recoil engines on wheels, I cannot share your opinion for the following reasons:

The disadvantage for the launch of test rockets—as you will certainly know—is the fact that the rocket can only be used once or can only be used again after longer repair time and, moreover, the major disadvantage is that from the time of launching the rocket, it is impossible to precisely track the working and functioning of the rocket. This caused me to set up a test station (recoil engine for liquid fuel) on a chassis in spring this year. This construction was a major contribution to the successful design of my liquid-propellant rocket II. The rocket car provided information on every working stage I had only learned little or nothing about when using test rockets. The fact that it has no proven success record as means of transport so far is clearly evidenced by the principle itself; but it fully paid off as mobile test station in my special case.

Please be so kind as to take note of this interesting development and send me a copy of your bulletin every month for consideration.

This letter forms part of the Willy Ley Collection and shows that Franz Kareis states to have launched a liquid-propellant rocket already in mid-1930 and is working on an improved second model to be shortly launched in mid-1931. His work was only supported by his assistant, Ms. Dr. Grosser, without any financial help.



Figure 7-7: Letterhead of Franz Josef Kareis—machine technician—rocket designer.*

* Willy Ley Collection, National Air and Space Museum, Garber Facility, no shelf mark.

In 2015, Mr. Hopferwieser acquired an original document of the flight of a liquid-propellant rocket of Franz Kareis on May 6, 1932, and a respective collection of letters by Mr. Adolf Kosel, the publisher of the *Austria-Philatelist*, from the mid-1960s that also contains a letter by Ms. Grosser. Mr. Hopferwieser kindly provided copies of these documents to Hermann-Oberth-Raumfahrt-Museum (Hermann Oberth Space Museum) and enabled us to learn more about the work of Franz Kareis from the pen of Maria Grosser.³⁹

Dear Mr. Kosel!

In reply to your letter of 9th of this month, I take the liberty of informing you about the following.

Franz Kareis was a good friend of my family. He completed the State Trade School in Vienna attaining his Matura and as thousands of others back at the time, he was unable to find employment. With a lot of luck and little money he started designing a rocket to carry mail. After several years of attempts he finally managed this little launch. It was the first and last one and with this launch he carried the first letters, only approximately 30–50. They also included a letter to my husband. I do not remember to whom the other letters were addressed.

This successful launch and the attempts of Prof. Piccard to rise into the stratosphere in 1932 made the mail rocket uninteresting to Kareis. He started designing a rocket to be sent into the stratosphere. After several years of planning and crafting, he built a rocket model from aluminum sheet, equipped it with all sorts of instruments and considered manning this rocket already at that point in time. I had to leave this model behind during my relocation to Vienna. It was located in the basement compartment of my apartment in Vienna XVIII., Gymnasiumstrasse 27/17, back then. This apartment was given to a refugee woman with three children. I do not know as to whether this model is still there or whether it was used for playing by the three children.

Since 1938 and the war events to follow we have not heard anything from or seen the Kareis family. I only learned from your letter that he passed away.

Following the death of my husband I also found a box containing stamps in his estate that also included this envelope. As I do not understand anything about stamps, I gave all of it to the Specialist Teacher Rettenbacher of Hauptschule Golling, who, upon request, exchanged this envelope for other stamps.

I hope this information is of service to you and send you kind regards from Golling

From Maria Grosser, we learn that Kareis was a close friend of the Grosser family, that he actually launched a liquid-propellant rocket and was working on another model of a register rocket for stratosphere research.

Maria Josefa Grosser, née Frühmann, born on March 18, 1896, in Judenburg, resident in Graz, Hafnersiegl 43, married k.k. Oberleutnant d. R. Karl Josef Grosser, born on March 1, 1887, in Vienna and resident of XIIIIV. Vienna, Gymnasiumstrasse 27/2/17 in November 1917. Their daughter Hermine was born on September 3, 1919. Dr. Karl Grosser was pre-candidate notary in the time from November 11, 1918, until January 27, 1920, already candidate notary in November 1921 and deputy notary from April 6, 1923, until February 20, 1930, and notary public from February 20, 1930.⁴⁰ Dr. Karl Grosser was registered in Golling no. 49 from February 1, 1926. He died on August 14, 1959.⁴¹

Maria Grosser was registered in Golling 49, District of Hallein near Salzburg from December 30, 1944.⁴²

Dr. Karl Josef Grosser is listed in Adolph Lehmann's General Address Book of Vienna – 1931 – Volume 1 – page 449 in 1931. Until 1942, the last issue before the end of the war, he remained registered as: Grosser, Karl Josef, JDr. Notary Public, XVIII/1, Gymnasiumstr. 27.⁴³ His wife, Maria, was registered under; Grosser, Maria, Priv., XVIII, Gymnasiumstr. 27 from 1932 until 1940.⁴⁴

This explains the title of Franz Kareis' assistant, Ms Dr. Grosser, in the letter dated June 7, 1931. At that time, it was common in Austria to use the husband's title before the wife's name, which made her Ms. Dr. Maria Grosser, although Maria herself had no such title.

A newspaper announcement dated April 12, 1931, of *Wiener Bilder*,⁴⁵ showing Kareis with a rocket on a desk with a microphone, reads as follows:



Figure 7–8, 7–9 and 7–10: Franz Kareis – press photo. Right: 22-year-old Franz Kareis, machine technician from Saalfelden, currently working in Vienna, having dealt with the issue of space rockets for 2.5 years and completed his design to launch the rocket in Saalfelden (Salzburg) in a few weeks. The photograph shows the rocket to be shortly launched made of chromium nickel steel and driven by three explosives.*

* Neues Wiener Abendblatt, Tuesday, April 14, 1931 (65th Edition, No. 103 and serial number 23400), p. 4 ANNO Austrian National Library, <http://anno.onb.ac.at/anno-suche>.

Another undated, and unfortunately incomplete, report⁴⁶ that cannot be attributed to any source states the following:

The .. card, d.. 1931 with ...rocket was launc...

For years, effort have been made to design usable rockets for the transport of mail or a drive for automobiles and aircraft...

the young Austrian inventor Franz Kareis designed a new rocket to be soon presented near Vienna after satisfactory preliminary tests.

(Left) The young Austrian inventor Franz Kareis designed a novel rocket, whose official test launch is to take place soon – Photo: Space...

The same illustration, however strongly retouched, was also published in the evening edition (*Neues Wiener Abendblatt*) of *Neues Wiener Tageblatt* on Tuesday, April 14, 1931 (65th Vol. number 103 and serial number 23400).⁴⁷

The short text: “Franz Kareis, a young Austrian, constructed a new rocket.”

The Viennese magazine *Neuigkeits-Welt-Blatt* reported the following in its 88th edition of April 16, 1931 on page 16 about the work of Franz Kareis:⁴⁸

Flying into Space

Sensational trials of an Austrian engineer

For more than two years the young Viennese mechanical engineer Franz Kareis has been grappling with the problem of a “space rocket.” Shortly after completing his studies and without following any previous models this young man started a series of theoretical and practical trials which have by now progressed to a level at which Kareis may attempt to launch his rocket for space flight.

In contrast to any previous attempts to launch rockets from the ground the young technician opted for launching from a captive balloon with which he wants to rise up into the air for about 600 meters. The rocket is tear-shaped, 1.6m long and the widest diameter is 17cm; it is made of chrome-nickel steel that is polished smoothly to minimize the friction between the air and the rocket’s external skin during flight, thus practically precluding the risk of fire. The rocket’s content, which understandably remains the constructor’s secret, consists partly of steel and partly of aluminum alloy.

The rocket is retained by several thin wires in a carrying basket attached to the outside of the balloon’s basket. As soon as the balloon will have reached an altitude of 600 to 700m the wires will be severed, the fuel will be ignited by an electric spark via nozzles at the rocket’s rear end, immediately initiating a series of explosions repeated ten times within one second sending the rocket almost vertically up into the air.

According to the inventor’s calculations the rocket will reach a speed of about five kilometers per second and reach its dead spot after flying for about thirty kilometers and then turn over. At that time the cap pulled over

the tip shall come off automatically, turning into a parachute to float the rocket softly down to the ground.

This would then complete the flying object's space travel and return to earth—unless some unexpected interference occurs, which is something one must always expect, the young inventor adds with a smile.

He is quite confident that his attempt to fire a rocket into space will be successful, though. It is not without pride that he points out that not only did he perform all of the calculations himself, but also built the rocket almost completely by himself. The tear shape with spherical tip narrowing towards the rear turned out to be the most suitable form according to his previous tests. Likewise, the composition of the fuel or explosive mix of petrol, oil and liquid air that is pressed from storage chambers into the mixing chamber from where it proceeds to the explosion chamber, is his own invention.

Kareis thinks that launching the rocket from a balloon is more fit to the purpose, because it makes the launch independent of a specific territory. As Kareis owns a large property in an area of the Salzburg region he can manage the start from his own land.

The young inventor concludes his interesting explanations by saying: "Certainly my rocket will not be flying without a talisman that I fitted into the spherical tip next to the altimeter and the thermometer. It is a small doll that my beloved mother used to play with when she was a child and that was her utmost joy."

Hopefully the doll will bring as much happiness to the son as it did to the mother. —e.

Two more documents that have been preserved, give further proof of this rocket mail flight.

Document no. 1⁴⁹ contains the following information:

Document (address page):

Addressee	Postmark	Own Mark
To H.W. Ms. Luise Kareis Pharmacist in <u>Saalfelden</u> Villa Sunnhof	a-7.V.32-9 * 1/1 VIENNA 1 AIRMAIL	KAREIS CARRIED BY ROCKET UNTIL DELIVERY TO THE POST OFFICE <u>Postmark:</u> Austria 20 (2x)

Postmark	Particulars
-6.V.32.15 ⁴⁰ 18/1 VIENNA 110 * R/1 *	Test rocket K7 Launch location: 5. Kö. Br. Date: 6./5 32 Time: 11 ^h 40 Min. Destination: Königsbrunn Vienna Letter no.: One—

Document (backside)

Stamp	Postmark
.J. KAREIS, machine technician Rocket designer Vienna-Saalfelden	-6.V.32.16 ³⁰ TELEGRAPH OFFICE 1 * R/6 *

Postmark	Postmark
-6.V.32.15 ⁴⁰ 18/1 VIENNA 110 * R/1 *	-6.V.32.15 ⁴⁰ 18/1 VIENNA 110 * R/1 *

Document no. 3⁵⁰ contains the following information:

Document (address page):

Addressee	Own mark
Mr. Dr. Karl Josef Grosser Notary Public in <u>Golling</u> Land Salzburg	KAREIS CARRIED BY ROCKET UNTIL DELIVERY TO THE POST OFFICE <u>Postmark:</u> Austria 20

Postmark	Particulars
6.v. 2.16 18/1 VIENNA 111 * e *	Test rocket K7 Launch location:5. Kö. Br. Date: 6./5 32 Time: 11 ^h 40 min. Destination: Königsbrunn Vienna Letter no.: Three—

Document (backside):

Stamp
F.J. KAREIS, machine technician Rocket designer Vienna-Saalfelden

An assessment of document no. 3 by mail experts commissioned by Mr. Adolf Kosel, the publisher of the *Austria-Philatelist*, produced the following result, according to the letter of the Post and Telegraph Directorate for Vienna, Lower Austria and Burgenland in Vienna, dated November 24, 1964:⁵¹

Concerning your letter dated November 24, 1964 to the Directorate of the Post Office Vienna 111, we gladly inform you that the stamp impression indicated on the photocopies is genuine. The stamp is still used by the Post Office 111 in a slightly modified form...

The President: Dr. Machold e.h.

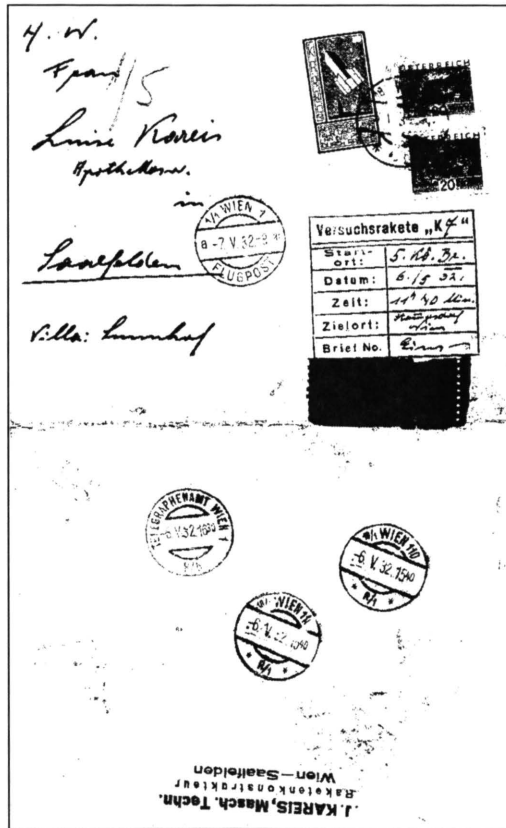


Figure 7-11: Document number 1.*

* Fax copy of Ms. Henriette Zeinler-Kareis for the Hermann Oberth Raumfahrt Museum 1995.

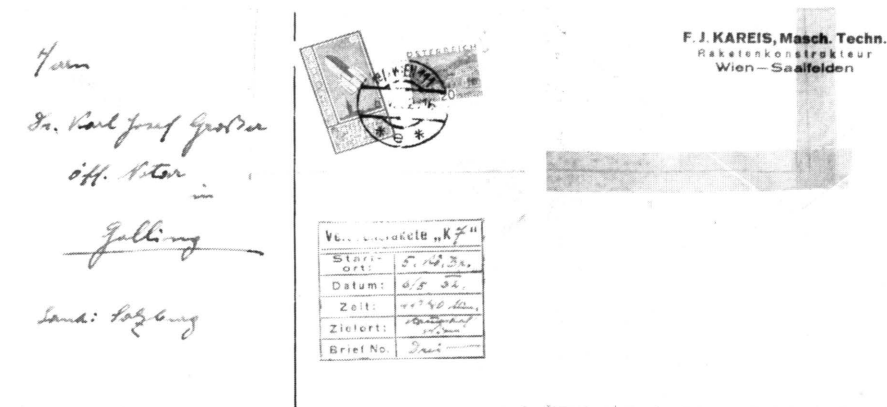


Figure 7-12: Document number 3.*

On May 6, 1932, at 11:40 am, Franz Kareis launched his test rocket K7 from Königsbrunn to Stammersdorf in the 21st Viennese municipal district (from 1938). The rocket documents bear a vignette “Kareis. Carried by rocket until delivery to the post office.” Postage and vignettes were devalued with the postmark of a post office near his apartment in Michaelerstrasse. Five letters were transported using the rocket K7.⁵² It is also remarkable that the Chairman of the Review Commission of the Austrian Society for the Promotion of Space Research Lt.a.D. Fritz Herdlitzka resided in Stammersdorf.

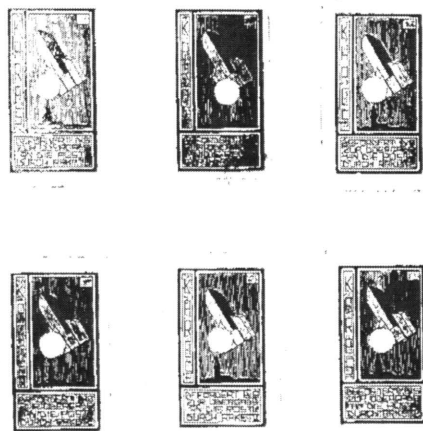


Figure 7-13: Devalued rocket marks.†

* Scan of Mr. Walter M. Hopferwieser for the Hermann Oberth Raumfahrt Museum 2015.

† Fax copy of Ms. Henriette Zeinler-Kareis for the Hermann Oberth Raumfahrt Museum 1995.

Daughter Henriette kindly provided some copies of document no. 1 (Figure 7–11) and a stamp block (Figure 7–13) to the Oberth Museum in 1995. It is also noteworthy that all six stamps of the block were “devalued” by means of punching.⁵³

The third volume of the *Rocket Mail Catalogue* of 1971 by Siegerverlag, Lorch, is the first to show an illustration of the vignette and rocket stamp of the alleged rocket start K7 near Stammersdorf (Vienna XXI.) on page 227 (Ill. 14). The publishing house asked for further information on the launch.



Figure 7–14: Siegerverlag *Rocket Mail Catalogue*, p. 227.*

IV. Conclusions

The Austrian Society for the Promotion of Space Research was known to the German Verein für Raumschiffahrt (Society for Space Travel). The driving force of the Society for the Promotion of Space Research appears to have been Franz Kareis, as he replied to the letter of the Society for Space Travel, although he was not a member of the proponent committee. He also replied on private letterhead, which identifies him as the rocket designer.

* *Rocket Mail Catalogue*, 3rd Volume, 1971, Sieger Verlag, Lorch, p. 227.

However, it is remarkable that Willy Ley, whose collection contains this letter by Franz Josef Kareis, filed it in the Folder 273 under “Rockets—Doubtful Reports, Unintentional Hoaxes, etc. (1931–1942).” Despite the notification that Kareis had already launched a liquid-propellant rocket in summer 1930, Ley—who was responsible for the foreign correspondence of the society—ignored it and did not try to verify its truthfulness by means of another letter and dismissed it as the letter of an impostor. This is even more remarkable as this launch of a liquid-propellant rocket would have been the first successful attempt of this type according to the state of knowledge at that time. Also in retrospect—as Goddard announced his launch of 1926 only in 1936—Franz Josef Kareis would have been the second after Robert H. Goddard to successfully launch a liquid-propellant rocket.

Yet the early resignation of Kareis as Chairman of the Society raises questions, particularly as he was listed in Adolph Lehmann’s General Address Book of Vienna as Chairman at the society’s address for several years. Apart from the activities of Franz Josef Kareis, no further activities of the society have been known. No lectures, no bulletin, only the trials of Kareis, on which basis whatsoever.

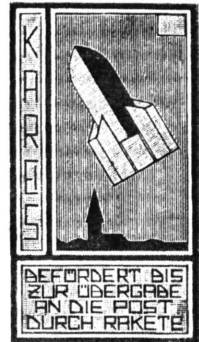


Figure 7–15: Kareis vignette.*

The letter by Maria Grosser from the year 1964 provides further insight into the motivation and working circumstances of Franz Kareis. We might not learn anything about his original motivation and why he dealt with this topic, but the mail rocket seems to have been his objective in the beginning. The successful launches into the stratosphere by means of a balloon made the exploration and design of such a stratosphere rocket his primary objective. However, this objective seems to have been of great value to him from the very beginning, as the society was named Society for the Promotion of Space Research. It can be assumed that the society had the main aim of fundraising for rocket tests, in this case to be attributed to Franz Josef Kareis. The question as to how far the society supported Kareis after his resignation cannot be conclusively answered. The possible conflict of interests between the chairman and beneficiary of financial aid might have been the decisive reason for his resignation. He would certainly have made himself vulnerable if, in his capacity as chairman, he had paid out funds to himself. This is supported by the fact that the association was not dissolved after the

* Karies Vignette, cleaned illustration of receipt number 3 of Mr. Walter M. Hopferwieser.

resignation of Kareis and, as the letter by attorney Haid shows, one was eager to raise money for the society. The selected location for the launch of the rocket K7—close to the place of residence of one of the society’s office holders—also supports this thesis.

The question as to whether Franz Josef Kareis launched a rocket on May 6, 1932, is rather to be answered with “Yes” than “No.” In addition to his own statements, this was confirmed by Maria Grosser. The authenticity of the documents cannot be doubted. They originate from the time and already the existence of the devalued six-piece block of rocket stamps constitutes further proof of the trustworthiness of Kareis. Maria Grosser, the wife of a notary, is a credible contemporary witness, despite her age of 68 years, even if some details might be blurred after all these years.

In addition to his origin from a pharmacist family, his good friends, the notary family, his good standing, confirmed by the municipality of Saalfelden, all of which provide him with a trustworthy background and set him apart from several other soldiers of fortune of that time, it is above all his technical education that enabled him to design such a rocket. His entire education was theoretically as well as practically based on mechanical engineering as well as the two semesters he spent at Vienna Technical University. He had the knowledge, the skills, and the will.

The registration data of the Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, show that Franz Kareis and Maria Grosser were registered in Vienna during the periods indicated.

Further research will be necessary to find out more details if it turns out that he launched a liquid-propellant rocket already in mid-1930—which would be of major importance to the early history of rocket engineering, even if he was unable to significantly influence general rocket engineering due to financial difficulties, which so many others experienced during that period of time as well.



Figure 7-16: Signature—Franz Kareis—with stamp.*

* Austrian State Archive, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125, Letter February 2, 1932.

In the period from May 28 until June 4, 2016, the collection of Mr. Hopferwieser was displayed at the “World Stamp Show NY,” the global FIP stamp exhibition in New York, and thus showed the first “air-traveled” Kareis proof at a global stamp exhibition.⁵⁴

Acknowledgments

My special thanks go to the following persons without whose cooperation or support this paper would not have come about:

Dr. Michaela Laichmann, Ms. Dr. Altfahrt, Ms. Wuchse, Mr. Denk, and Mr. Merkel
Magistrat der Stadt Wien, Magistratsabteilung 8, Wiener Stadt- und Landesarchiv
Mag. phil. Dr. phil. Juliane Mikoletzky
Vienna Technical University, Head of University Archive
Johannes Krachler
Magistrate of the Provincial Capital of Linz, Archive of the City of Linz
Mag. Dr. Rudolf Oberschneider
Municipality of Saalfelden—Head of Office
Roman Fercher
Civil Registry Office—Gen. Administration Director
Hannes Bacher
Registration Office
Manuel Plöchl
St. Andra-Wördern—Registration Office—Director of the Registration Office
Sabrina Hager
City of St. Pölten—Residents’ Registration Office
Martina Erber
Municipality of Furth near Göttweig—PR
Ursula Mock
Proof reading
Elke Limberger
English translation

Very special thanks go to two persons without whose cooperation or support this work would not have been possible in that way:

Ms. Henriette Zeinler-Kareis
Mr. Walter Michael Hopferwieser

Appendix

Biographical information on the executive board of the Austrian Society for the Promotion of Space Research

Further data or activities are known about two members of this association: Franz Kareis and Anton Leithner. The registration data of the City of Vienna are known for all other members provided that they resided in Vienna. It should be noted that professional titles of this time, e.g. technicians, are not equivalent to completed studies or training, as they were often internal company titles.

Anton Josef Leithner

Within the scope of the approval procedure for the association, the authorities took a closer look at the “Chairman” of the founding committee. As the address of the proponent committee was “Anton Leithner p.A. ‘Jung-christlich-soziale Bewegung’, Vienna I, Herrngasse 2” officials also made inquiries about Leithner. Their findings were as follows:

The authorities found that the address was only a postal address. Anton Leithner, born on May 13, 1902, in Vienna, was a post office clerk and resident of Ullmannstrasse 45, 1/22. He supervised the Group of district VIII for the “Young Christian Social Movement” and the other group leaders reported that Leithner had a good reputation. Further investigations indicated that Leithner was a contract employee and resident at Ullmannstrasse 45, 1/22 since December 1930 as a lodger for 30 schillings monthly. He worked for the Post Office No. 45 in district III, Hetzgasse No. 35 as contract employee for a monthly salary of 193 schillings. He had no assets and did not have to provide for anyone. His father, Anton L., was in care in the retirement home Lainz and his mother, Theres L., was deceased.⁵⁵

According to the registration records of the City of Vienna, Anton Leithner was in Vienna on May 13, 1902, subscribed to the Augsburg Confession and his home jurisdiction was Vienna. There are 25 registration entries listing him as “single” in the period between 1920 and 1935. From November 22, 1935, he was registered as single chemist in Vienna XVII., Frauengasse 5/1/7. On February 6, 1936, there was an eviction from the apartment and Leithner was resident in Vienna VI., Barnabiten-gasse 4/1/1/9 from February 13, 1936, until November 4, 1936. On November 2, 1936, he married Ms. Gertrude Josefine Annemarie Reineck, born on December 19, 1915, in Vienna, and was residing at Tau-bergasse 4/1/5. The couple moved to Linz on March 31, 1937. He stayed in the home for unmarried persons in Vienna XVII., Wurlitzergasse 89 from July 30, 1938, until August 7, 1938, coming from Graz, house of the Schlossberg 4. He

was a post office clerk then residing in Vienna XVI., Panikengasse 35/1/3 as editor with his spouse from August 7, 1938. The couple moved to Zieglergasse 35/3/13 in the 7th district on September 19, 1938. From May 31, 1940, until June 12, 1940, Anton Leithner was under arrest in the Regional Court 1. Meanwhile, he was divorced and stayed in the home for unmarried persons in Vienna XVII., Wurlitzergasse 89 after his release. He moved to an apartment in VIII. Vienna, Piaristengasse 54/4/2 on June 17, 1940. He deregistered and went to Vernsdorf on May 16, 1942. On August 31, 1943, he married his second wife, the dress-maker Elfriede, née Bröderecker, born on October 25, 1911, in St. Pölten. They resided at VIII. Vienna, Loidoldgasse 4/5g, from June 25, 1945.⁵⁶ The couple had a new residence in St. Pölten, Schneckgasse 13, from July 14, 1945. On March 19, 1954, the couple moved to the Municipality of Furth near Göttweig⁵⁷ and was registered in Furth from then on. Anton Leithner died on November 25, 1978.⁵⁸

Rudolf Kowarik

He held the office of the secretary and treasurer and was residing in Vienna VIII., Loidoldgasse 4/3/13. Kowarik, born on October 10, 1901, in Vienna, was of Roman-Catholic confession and his home jurisdiction was Vienna. The registration records of the City of Vienna listed him as single commercial university graduate on March 4, 1919, for the first time. On January 15, 1934, he married Juliane Zimmermann, born on August 16, 1903. The married couple moved to the apartment in Loidoldgasse 4/1/5b and he then worked as advertising expert. The marriage was divorced on February 23, 1943. He worked as a Gau (district) official for the company Club der Alten Wiener, Vienna I., Bäckerstrasse 16, from August 30, 1934, until November 6, 1947. On July 17, 1943, he married his second wife, Maria Theresia, née Biruss, born on May 23, 1911, in Vienna. He worked as accountant from November 6, 1947, and died in his apartment in Vienna on June 17, 1963.⁵⁹

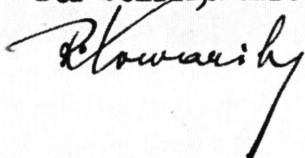
Der Schriftführer:


Figure 7-17: Signature of R. Kowarik.*

* Austrian State Archive, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125, Letter February 2, 1932.

Dr. August Diglas

He served as legal advisor. He was born in Vienna on February 6, 1902, of Roman-Catholic confession and resident in Wördern, Franz-Schubert-Gasse 7. After October 20, 1930, he worked as a civil servant at the federal level. No registration data could be found for his childhood and youth in Vienna. He moved to XIII. Vienna, St. Veit Gasse 52 on August 1, 1935.⁶⁰ He was registered as administrative district secretary under this address from August 7, 1935, together with his spouse Anna, née Hoffmann, born on May 9, 1905, in Holic, Moravia, and their son, Kurt, born on April 19, 1932, in Vienna. On July 1, 1936, he deregistered and went to Krems in Lower Austria, Wertheimgasse 18. The family was again registered in XIII. Vienna, Testarellogasse 9 from April 28, 1937. He then was an official of the Lower Austrian Provincial Trade Association, company Atelier Bauernmarkt, 1, Bauernmarkt 24. There are no further entries in Vienna.⁶¹ Dr. rer. pol. August Diglas died at the age of 79 years on March 16, 1981, and was buried in the family tomb at the Viennese cemetery Hietzing, Maxingstrasse 15 on March 23, 1981. His wife Anna, who died on October 20, 1978, and his son Kurt, who died on October 3, 2005, are buried next to him.⁶²

Alfred Hotwagner

He became the Statistics Director, according to the minutes of the constituent meeting of July 3, 1931. According to the minutes, he was residing in VIII. Vienna, Daungasse 4 at that point in time. Alfred Hotwagner, born on June 29, 1902, in Vienna, religious, was an Austrian citizen. He was co-registered “on the card of his father Anton” and is personally registered in the registration records of the City of Vienna as student in Vienna, 8th district, Daungasse 4/5 and 6 in the period from December 10, 1919, until July 20, 1929. He is registered as official under the same address from July 20, 1929, and deregistered and moved to Italy on September 13, 1933. Coming from Kaliningrad (Prussia), Balgastr. 7, he resided several times at Daungasse 4/5 and 6 from April 20, 1938, registered in Vienna as customs official and deregistered for Kaliningrad on May 7, 1938. He visited his parental home in Vienna several times from May 17, 1939, coming from Cranz in Eastern Prussia, Kanzlerstrasse 19, to where he returned on May 23, 1939. Meanwhile, he had become a civil servant. He returned from Kaliningrad to Daungasse in Vienna on June 14, 1939. He was an employee in Vienna and registered in Vienna with his spouse Viktoria, née Schörg, born on February 27, 1921, in Vienna, and their child Rike, born on November 5, 1941, in Vienna, until February 20, 1943. He was registered as employee of the Reich in Vienna 14., Hainbach 42, from September 2, 1940, until January 1, 1947 (double registration), and deregistered in September 1946 to go to Germany.⁶³

Fritz Herdlitzka, Lt.a.D

He was the Presiding Review Commissioner. Friedrich Johann Herdlitzka, born on May 6, 1898, in Budapest, was an official auditor, of Roman Catholic confession and had Austrian citizenship. As Stammersdorf was not incorporated by Vienna until 1938, his registration data state that he was resident in the new Viennese district XXI Stammersdorf, in Jedlersdorfer Strasse 385, on September 18, 1939, together with his spouse Margarethe, née Brunner, born on April 23, 1912, in Vienna, and their daughter Margarethe, born on May 30, 1930, in Vienna. He died on April 28, 1952, at his residence in Stammersdorf, Jedlersdorfer Strasse 385.⁶⁴

Ing. Fritz Umschaden

He was appointed the editor in charge of the bulletin of the Austrian Society for the Promotion of Space Research according to the minutes of the constituent meeting of July 3, 1931. Ing. Umschaden was born on May 16, 1904, in Vienna, of Roman-Catholic confession, Austrian citizen, and married to Marianne, née Mader, born on August 7, 1910. He was registered as student or technician in XV. Vienna, Mariahilfer Gürtel 38/8 from January 3, 1924. Prior thereto he had been co-registered with his parents. He moved to VI. Vienna, Stumpergasse 9/29 as operating engineer on August 2, 1928. In the meantime, he became a mechanical engineer and moved to Gumpendorfer Strasse 106/23 in the same district on September 17, 1928. He again changed his residence within the same district to Mollardgasse 61/14 on November 3, 1928. He changed his address within the same street for only some days to the street number 83/19 on August 31, 1929. He was already registered in Amerlingstrasse 15/6 on September 2, 1929, and moved to Müllnergasse 6/5 in the 9th district on May 15, 1930. The latter is also his residential address according to the minutes of July 3, 1931. He was then to move to XVII. Vienna, Kalvarienberggasse 13/7 as official on October 31, 1931. He is registered as chief editor and engineer on November 2, 1948. His wife died on November 7, 1960, in their permanent apartment in XV. Vienna, Mariahilfer Gürtel 35/1, which is listed as sole place of residence. Fritz Umschaden remained registered in Kalvarienberggasse 13/7 until November 9, 1967. However, there is a double registration for the period from January 31, 1962, until November 20, 1964, according to which he was also re-registered from subtenant to main tenant in XV. Vienna, Mariahilfer Gürtel 35/8. There are no further registrations for the period after November 9, 1967.⁶⁵ Friedrich Umschaden died on September 20, 1997, and was buried at the cemetery Hernals in Leopold-Kunschak-Platz 7 in Vienna on October 3, 1997.⁶⁶

Franz Josef Kareis

More information is available on Franz Kareis, the first Chairman of the Society, who launched a small mail rocket with a liquid-propellant engine on May 6, 1932. The respective records were mainly compiled by Mr. Walter M. Hopferwieser and the author. Most significantly, Mr. Hopferwieser succeeded in finding important documentation on the rocket launch (including a receipt that had been flown) and the living situation of Franz Kareis, while the author was able to collect two letters, newspaper articles and official data. Both sources excellently complement each other to roughly trace the life of Franz Kareis, the most interesting member of the Austrian Society for the Promotion of Space Research in terms of “rocket-technology.”

Franz Josef Kareis was born on March 27, 1909, in Vienna. He was baptized as Roman Catholic. His home jurisdiction was Saalfelden near Salzburg.⁶⁷ His father Josef Kareis born on February 15, 1861, in Kaaden CSR, was a pharmacist in Saalfelden, where he died on October 12, 1927. His mother Aloisia, also a pharmacist, née Aulich, was born on February 22, 1879, in Neu-Erbersdorf CSR, and also lived in Saalfelden until her death on February 20, 1947.⁶⁸ His mother lived at Villa Sunnhof in Saalfelden in 1932 and am Obsmarkt 13 in Saalfelden in 1947. His parents married in Troppau in 1910.⁶⁹

Franz Kareis was registered in Vienna in Kaiserstrasse 92 as protégé in the apprentice home VII from August 7, 1925, until September 28, 1927. He was registered as middle school student in district XVIII, Edmund-Weiss-Gasse 11 (Villa) from September 19, 1927, until July 9, 1930.⁷⁰ The villa was located across the observatory and in approximately 600 meters walking distance from the Federal Grammar School in Klostergasse 25 in district XVIII, where Ph. Dr. Anton Spigi, teaching geography and history, was director. In addition to its director the school staff consisted of 33 teachers in the academic year 1929. The following subjects were taught at the grammar school: mathematics, descriptive geometry, physics, natural history, German, English, French, geography, history, classic philosophy, stenography, freehand drawing, religion, singing, gymnastics and handicraft.⁷¹ He first attended grammar school, then the machinery school and was awarded a school leaving certificate of the work master school for mechanical engineering on July 5, 1930.⁷² There were two educational institutions of this type in Vienna in the year 1929. First, there was the Federal Technical College for Mechanical Engineering and Electrical Engineering in district X in Pernerstorfergasse 81. Second, the Federal Technical College for Mechanical Engineering in Vienna, district XXI/1, Schlossofer Strasse 8, which he most probably attended due to the geographical proximity to Edmund-Weiss-Gasse. It consisted of a higher department for mechanical engineering and a work master

school for mechanical engineering. Ing. Regrs. R. Fachinspektor Josef Schleschla was its director. The college and school staff consisted of five professors, three teachers and three assistants.⁷³ Thereafter, he returned home to Saalfelden from July 9, 1930, until September 4, 1930, and several times registered as chemist in Edmund-Weiss-Gasse 11 until December 11, 1930. He moved to Michaelerstrasse 16/8, also in district XVIII, on December 12, 1930, where he was registered as mechanical engineer until February 1, 1932.⁷⁴

He attended lectures at the Department of Mechanical Engineering in the winter and summer semesters as extraordinary listener—enrollment certificate 115 / 1931 from October 30, 1931. The following lectures were scheduled:⁷⁵

Course no.*	Subject	Hours per week		Course fees		Remark of the lecturer
		WS	SS	1st semester K h	2nd semester K h	
04	Mathematics a. Lectures	5	4			Fahlen
39.40	Mechanics a. Lectures	5	6			Lechner
	do. a. Exercises	2	2			Jung
28	Descriptive geometry					
	a. Lectures	4	4			Eckhard
	b. Exercises	4	2			Eckhard
		70	Hours			

He attended the subjects required in order to obtain Matura (= A-levels)—which he needed as prerequisite for his studies—at TU Vienna as auditor,⁷⁶ as such he was not admitted to examinations. But still a public character reference of the Municipality of Saalfelden was a prerequisite. This reference states that his then home municipality Saalfelden / Steinernes Meer

“confirmed his residence in Vienna as mechanical engineer and according to official knowledge there were no adverse circumstances, but the latter has an excellent reputation and enjoys general respect”.⁷⁷

According to information provided by Ms. Grosser, the assistant to Franz Kareis, he completed his Matura at the State Trade School in Vienna.⁷⁸

In the inter-war period, Kareis worked as construction supervisor for a Linz-based construction company in Vienna.⁷⁹ It might be reasonably assumed that he also started to work for this company in Africa, as he deregistered for Africa on February 1, 1932.⁸⁰ Unfortunately, there is no information on his stay in Africa.

It is not clear whether he actually went to Africa, as he launched a liquid-propellant rocket with post receipts in Stammersdorf on May 6, 1932.

Franz Kareis was registered as mechanical engineer in Linz on Danube, Kaisergasse 22, from September 29, 1939, until March 7, 1940.⁸¹ The residents' register of Linz also lists him as inhabitant of Kaisergasse 22 in 1940 as Kareis Franz, Masch.-Ing. (mechanical engineer).⁸² He moved to Wischerstrasse 9 in Linz on March 7, 1940. On April 6, 1940,⁸³ Franz Kareis married his wife Maria Schöppl, born on December 8, 1912, in Linz.⁸⁴

From August 8, 1940, until December 2, 1940, Franz Kareis—meanwhile graduate engineer and married, was again listed in the Viennese district IX in Rossauer Lände 23/2 alone. Their daughter Helga Henriette was born on September 30, 1940, in Linz.⁸⁵ Franz Kareis was deregistered in Vienna to the new address at Wischerstrasse 13 in Linz in the time from December 2 until December 7.⁸⁶ It can be assumed that he took his family from Linz to their new domicile in Vienna during this period of time, as the family then settled down in the Viennese district II in Krummbaugasse 1/2/12 after December 7, 1940.⁸⁷

Franz Kareis died on the battlefield at Stalingrad on April 30, 1943,⁸⁸ and left behind his wife and their not even three-year-old daughter. The basic reference data sheet from Linz states April 20, 1943,⁸⁹ as date of death. He was declared dead on April 15, 1947 (Regional Court for Civil Matters, Department 48, Number 48 T 658/47-3); it was pronounced that he did not survive April 30, 1943.⁹⁰

References

- ¹ Dr. Franz Edler von Hoefft as well as Guido von Pirquet, April 3, 1919, annulment of nobility status by Law on Nobility Abolishment.
- ² Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-551350/2015.
- ³ Austrian State Archive Vienna, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1060.
- ⁴ Austrian National Library in Vienna, <http://anno.onb.ac.at>, Reichspost, January 1, 1928, 35th Vol., no. 1, pp. 18–19.
- ⁵ *Ibid.*, Reichspost, March 15, 1928, 35th Vol., no. 75, p. 6.
- ⁶ *Ibid.*, Reichspost, February 8, 1928, 35th Vol., no. 39, p. 10.
- ⁷ *Ibid.*, Reichspost, March 23, 1928, 35th Vol., no. 83, p. 10.
- ⁸ Library and Archive System of the University of Vienna Austrian Central Library for Physics Department Library Chemistry Erwin Schroedinger, Archive, Partial estate of Guido von Pirquet Sign. W87-1, 7. Collection 7 newspaper clippings Lecture poster von Hoefft.
- ⁹ Austrian National Library Vienna, <http://anno.onb.ac.at>, Reichspost, February 7, 1929, 36th Vol., no. 38, p. 9.
- ¹⁰ *Ibid.*, Workers' Newspaper, April 17, 1929, 42nd Vol., no. 106.

- ¹¹ Austrian National Library Vienna, Vorarlberg local newspaper, June 15, 1928, 65th Vol., no. 138, pp. 2–3.
- ¹² *Ibid.*, Innsbruck news, Thursday, June 26, 1928, no. 145, p. 6.
- ¹³ *Ibid.*, Reichspost, April 14, 1929, 36th Vol. no. 103, p. 24.
- ¹⁴ *Ibid.*, Reichspost, September 2, 1929, 36th Vol., no. 242, p. 6.
- ¹⁵ *Ibid.*, Reichspost, September 9, 1929, 36th Vol., no. 249, p. 6.
- ¹⁶ *Ibid.*, Reichspost, September 16, 1929, 36th Vol., no. 256, p. 7.
- ¹⁷ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-551350/2015.
- ¹⁸ Werner Brügel, “Men of the Rocket,” Hachmeister & Thal, Leipzig, 1934, p. 34.
- ¹⁹ Austrian State Archive Vienna, Shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1060.
- ²⁰ Werner Brügel, “Männer der Rakete,” Hachmeister & Thal, Leipzig, 1934, p. 34.
- ²¹ Austrian State Archive Vienna, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1060.
- ²² Archive author, *Flug*, April 1931, pp. 13–14.
- ²³ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-AW 539967/2015 –WStLA M.Abt. 119, A32: 3769/ 1931.
- ²⁴ Archive author, *Flug*, April 1931, p. 14.
- ²⁵ Austrian State Archive Vienna, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125 Notification Magistrate Department 49/3166/31, dated April 18, 1931.
- ²⁶ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-AW-539930/2015, M.Abt. 119, A32: 3166/ 1931, Letter dated April 13, 1931.
- ²⁷ Austrian State Archive Vienna, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125, 4-page statutes.
- ²⁸ Austrian State Archive Vienna, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125, Letter dated July 3, 1931.
- ²⁹ Austrian State Archive Vienna, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125, Letter dated February 2, 1932.
- ³⁰ Vienna digital library, <http://www.digital.wienbibliothek.at>.
– Adolph Lehmann’s General Address Book of Vienna, Vol. 1, 1st Part. Inhabitants of Vienna 1932–1938, 1932, p. 734, 1934, p. 584, 1936, p. 568, 1938, p. 563
- ³¹ Austrian State Archive Vienna, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125 Letter dated June 14, 1932.
- ³² *Ibid.*, Letter dated June 22, 1932.
- ³³ Vienna digital library, <http://www.digital.wienbibliothek.at>, Adolph Lehmann’s General Address Book of Vienna, Vol. 1, 1st Part. Inhabitants of Vienna 1932, p. 64.
- ³⁴ Austrian State Archive Vienna, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125, Letter dated November 30, 1939.

- ³⁵ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-AW-539930/2015, M.Abt. 119, A32: 3166/ 1931, Letter final report dated June 26, 1939, last stamp dated March 6, 1941.
- ³⁶ *Ibid.*, form with date stamp March 4, 1941.
- ³⁷ *Ibid.*, notification dated May 22, 1941.
- ³⁸ Willy Ley Collection, National Air & Space Museum, Garber Facility, Folder 273 Rockets, Doubtful Reports.
- ³⁹ Walter M. Hopferwieser, Oberdorf in Burgenland, Collection Kareis.
- ⁴⁰ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-332159/2016.
- ⁴¹ Walter M. Hopferwieser, Oberdorf in Burgenland, Collection Kareis, Letter Municipality Golling November 27, 1964.
- ⁴² Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-332159/2016.
- ⁴³ Vienna digital library, <http://www.digital.wienbibliothek.at>, Adolph Lehmann's General Address Book of Vienna, Vol. 1, 1st Part. Inhabitants of Vienna 1932–1942.
- ⁴⁴ Vienna digital library, <http://www.digital.wienbibliothek.at>, Adolph Lehmann's General Address Book of Vienna, Vol. 1, 1st Part. Inhabitants of Vienna from 1932–1940.
- ⁴⁵ Archive author, Wiener Bilder, Sunday, April 12, 1931, 36. Vol., no. 15, p. 17.
- ⁴⁶ Fax copy of Ms. Henriette Zeinler-Kareis for Hermann Oberth Raumfahrt Museum 1995.
- ⁴⁷ Austrian National Library Vienna, <http://anno.onb.ac.at>.
- ⁴⁸ Austrian National Library Vienna, <http://anno.onb.ac.at>, Neuigkeits-Welt-Blatt, Vienna, Thursday, 16 April 1931, Year 58, Number 88, p. 16.
- ⁴⁹ Fax copy of Ms. Henriette Zeinler-Kareis for the Hermann Oberth Raumfahrt Museum 1995.
- ⁵⁰ Walter M. Hopferwieser, Oberdorf in Burgenland, Collection Kareis, Rocket mail receipt no. 3, Franz Kareis, rocket 7.
- ⁵¹ Walter M. Hopferwieser, Oberdorf in Burgenland, Collection Kareis, Letter dated November 24, 1964.
- ⁵² Walter Michael Hopferwieser, Pioneer rocket mail and cosmic mail, Active Intermedia Verlag, Vienna, 2016, p. 24.
- ⁵³ Fax copy of Ms. Henriette Zeinler-Kareis for the Hermann Oberth Raumfahrt Museum 1995.
- ⁵⁴ Walter M. Hopferwieser, E-mail to author dated May 26, 2016.
- ⁵⁵ Austrian State Archive Vienna, shelf mark: AT-OeStA/AdR BKA BKA-I BPDion Wien VB Signatur XIV 1125, Report Mai 15, 1931.
- ⁵⁶ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-437299/2016.
- ⁵⁷ City of St. Pölten, E-mail dated June 13, 2016, Sabrina Hager, Residents' Registration Office, Registration cards Anton and Elfriede Leithner.
- ⁵⁸ E-mail dated June 29, 2016, from Martina Erber, Public Relations of the Municipality of Furth near Göttweig, registration information.

- ⁵⁹ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-437326/2016.
- ⁶⁰ E-mail dated June 14, 2016, from Manuel Plöchl, Registration Office Director, St. Andra, Wörtern, Registration card August Diglas.
- ⁶¹ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW- 480201/2016.
- ⁶² https://www.friedhoefewien.at/grabsuche_de, August Diglas, Anna Diglas, Kurt Diglas.
- ⁶³ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-437349/2016.
- ⁶⁴ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-454128/2016.
- ⁶⁵ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-437379/2016.
- ⁶⁶ <https://www.friedhoefewien.at/grabsuche>.
- ⁶⁷ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-512868/2015.
- ⁶⁸ *Ibid.*, p. 2.
- ⁶⁹ Municipality of Saalfelden, Civil Registry Office, General Administration Director Roman Fercher, E-mail dated June 1, 2016.
- ⁷⁰ *Ibid.*, p. 1.
- ⁷¹ Vienna digital library, <http://www.digital.wienbibliothek.at>, Adolph Lehmann's General Address Book of Vienna, Vol. 2, 5th Part. Teaching institutions, middle school of Vienna 1929, p. 188.
- ⁷² Technical University of Vienna Archive, TUWA extraordinary students 1931/32, pp. 103–104.
- ⁷³ Vienna digital library, <http://www.digital.wienbibliothek.at>, Adolph Lehmann's General Address Book of Vienna, Vol. 2, 5th Part. Teaching institutions, specialized training and educational institutions of Vienna, 1929, p. 198.
- ⁷⁴ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-512868/2015.
- ⁷⁵ TUWA extraordinary listeners 1931/32, pp. 103–104.
- ⁷⁶ Walter Michael Hopferwieser, E-mail to author dated May 26, 2016.
- ⁷⁷ TUWA extraordinary listeners 1931/32, pp. 103–104.
- ⁷⁸ Walter M. Hopfenwieser, Oberdorf in Burgenland, Collection Kareis.
- ⁷⁹ Walter Michael Hopferwieser, Pionier Rocket Mail and Cosmic Mail, Active Intermedia Verlag, Vienna, 2016, p. 24.
- ⁸⁰ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-512868/2015.
- ⁸¹ Magistrate of the Provincial Capital of Linz, Archive of the City of Linz, PZS/Arc/Kra/1158, basic reference data sheet 09281086.
- ⁸² <https://www.findbuch.at>, 34_7._Teil_Einwohnerverzeichnis_nach_Strassen_geordnet_K.

⁸³ Ibid.

⁸⁴ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-512868/2015.

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Magistrate of the Provincial Capital of Linz, Archive of the City of Linz, PZS/Arc/Kra/1158, basic reference data sheet 09281086.

⁸⁹ Magistrate of the City of Vienna, Magistrate Department 8, Vienna City and National Archive, MA 8, B-MEW-512868/2015.

⁹⁰ Ibid.