100 years

Centenary Celebration

July 4, 2010

Vienna University of Technology

Presentation

by Gottfried Konecny,
Leibniz University Hannover

I would like to acknowledge the inspiration received from Jörg Albertz on how to prepare a 100 year celebration presentation, which he did last year in Jena for DGPF.

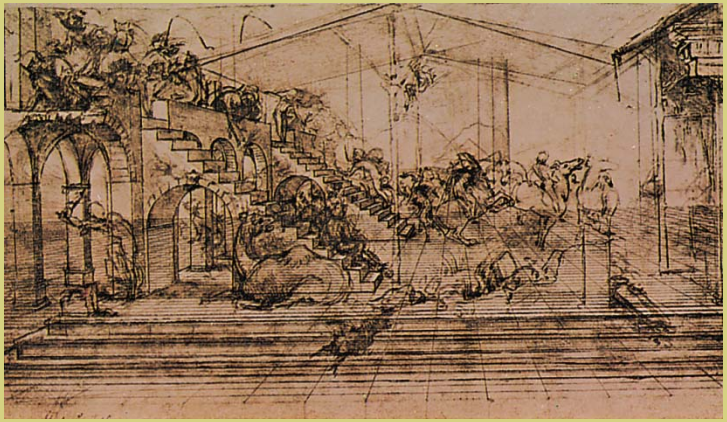
I also gratefully acknowledge the use of some of his slides

Self Portrait 1512

Fundamentals of Photogrammetry

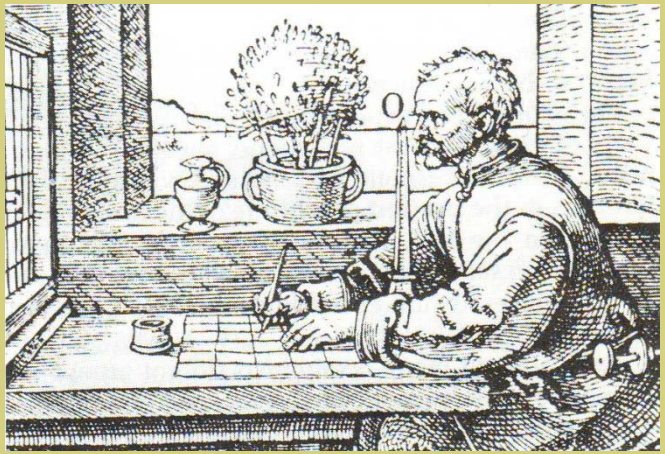
The Perspective

Self Portrait 1500



Leonardo da Vinci 1452-1519

Adoration of the Magi 1481



Albrecht Dürer

Instructions on the use of the Perspective 1525

Fundamentals of
Photogrammetry

Photography

Joseph Nicephore Niepce 1765-1833
invention of photography 1822

Louis Daguerre 1787-1851
practical use 1839

Kodak Film by George Eastman 1884

Additive Colour Imagery Adolf Miethe 1906

Fundamentals of Photogrammetry

Optics

Ignazio Porro,
Torino 1801-1875

Ernst Abbe,
Jena 1840-1905/1866

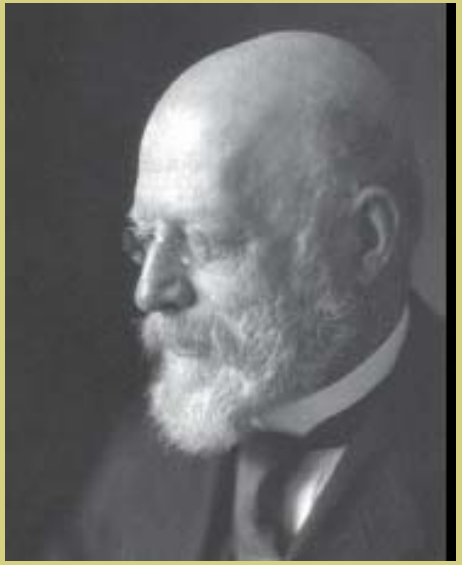
Aimé Laussedat
1819/1907 Paris Mapping

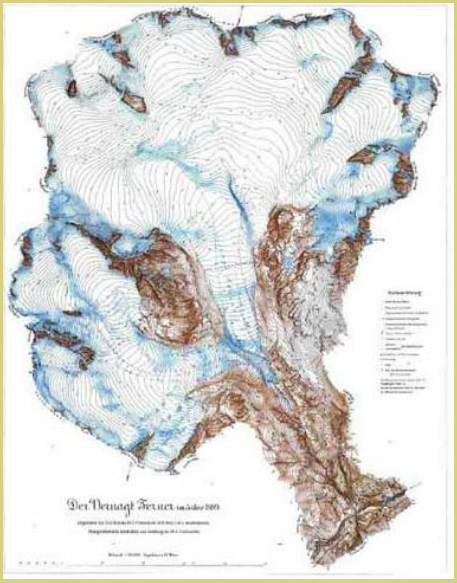
Albrecht Meydenbauer
1858/1865 Architectural Documentation

Iconometry Photogrammetry

the use of photographs for the survey of objects

Terrestrial Mapping Applications





Sebastian Finsterwalder, Vernagt Glacier 1889

Von Orel Stereoautograph 1907/1911

Plane Table Photogrammetry

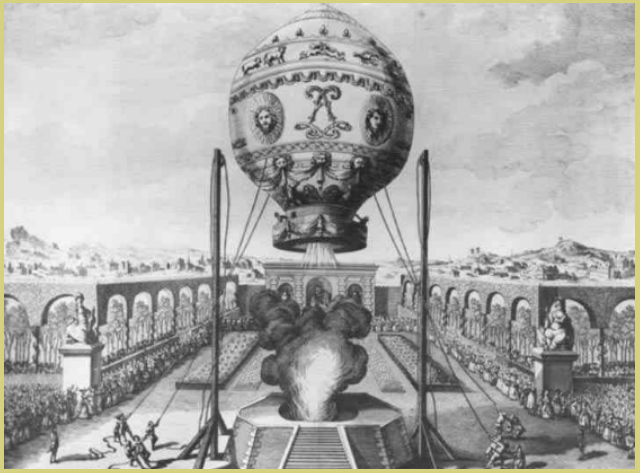
Glaciers

Stereo Photogrammetry

Mountain Areas

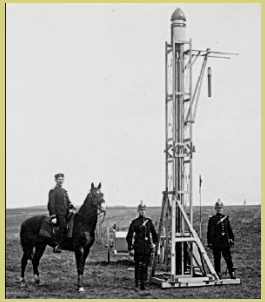
Fundamentals of Photogrammetry

Aerial Platforms



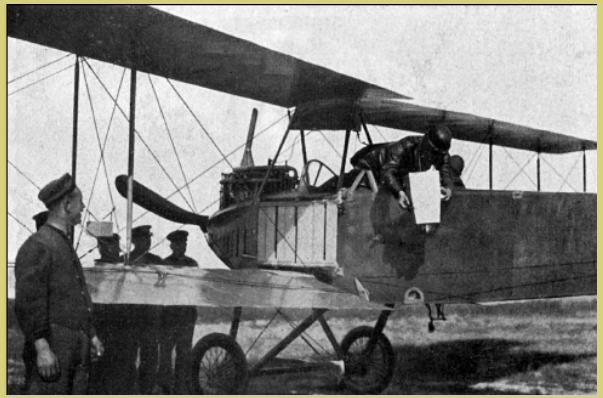
Jacques Etiene & Joseph Michel Montgolfier 1783

Gaspard-Felix Tournachon (Nadar)
balloon photography 1863



Rockets 1906

Zeppelin 1909



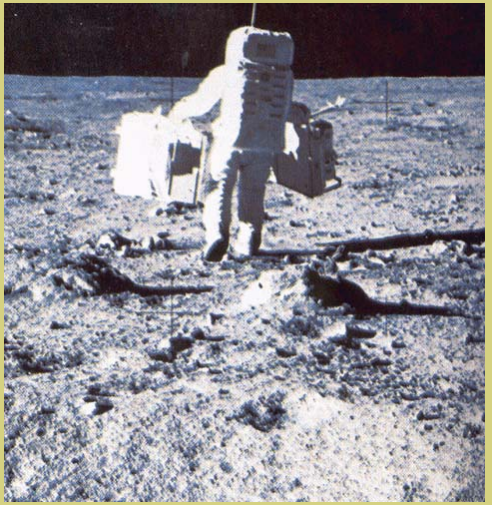
Aircraft 1914

Koroljov

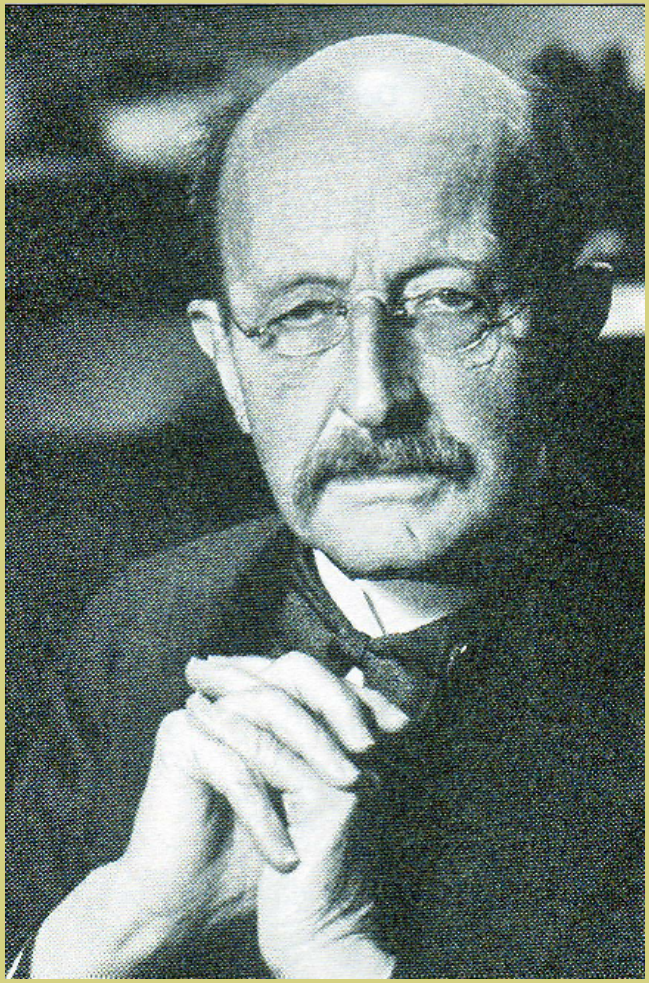
Wernher von Braun

Space Platforms

Sputnik 1957



Man on the Moon 1969



Remote Sensing Theory

Max Planck

1858-1947

1892 Professor University of Berlin
1900 Theory of Thermal Radiation
and Quantum Theory
1918 Nobel Prize for Physics
1929 Max-Planck Medal was instituted
and awarded to Max Planck and
Albert Einstein
1945 Evacuation to Göttingen from Berlin

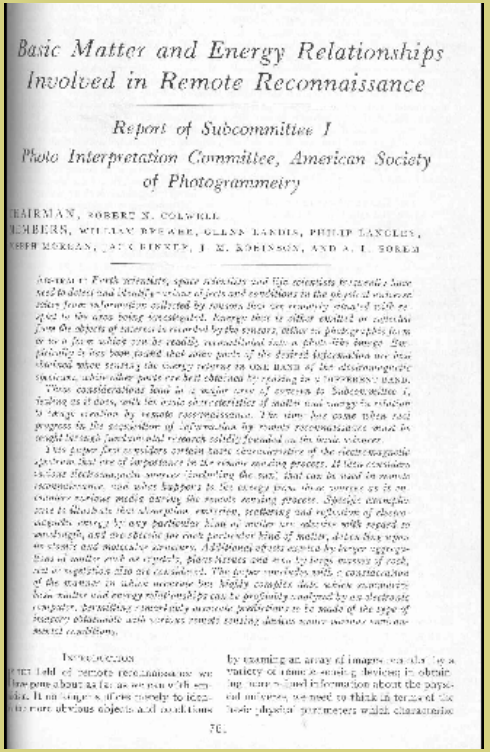
Remote Sensing Theory
Nobel Prize for Physics

5th Solvay Conference 1927
first row, 2nd from left Max Planck. 3rd Marie Curie, 5th Albert Einstein;
third row, 3rd from right Werner Heisenberg, 6th Erwin Schrödinger;

Remote Sensing Applications

the term „Remote Sensing“ was introduced by Ms. Evelyn Pruitt of the U.S. Office of Naval Research in the 1950´s

Robert N. Colwell, Forestry Professor, University of California at Berkeley 1963



Basic Matter and Energy Relationships Involved in Remote Reconnaissance

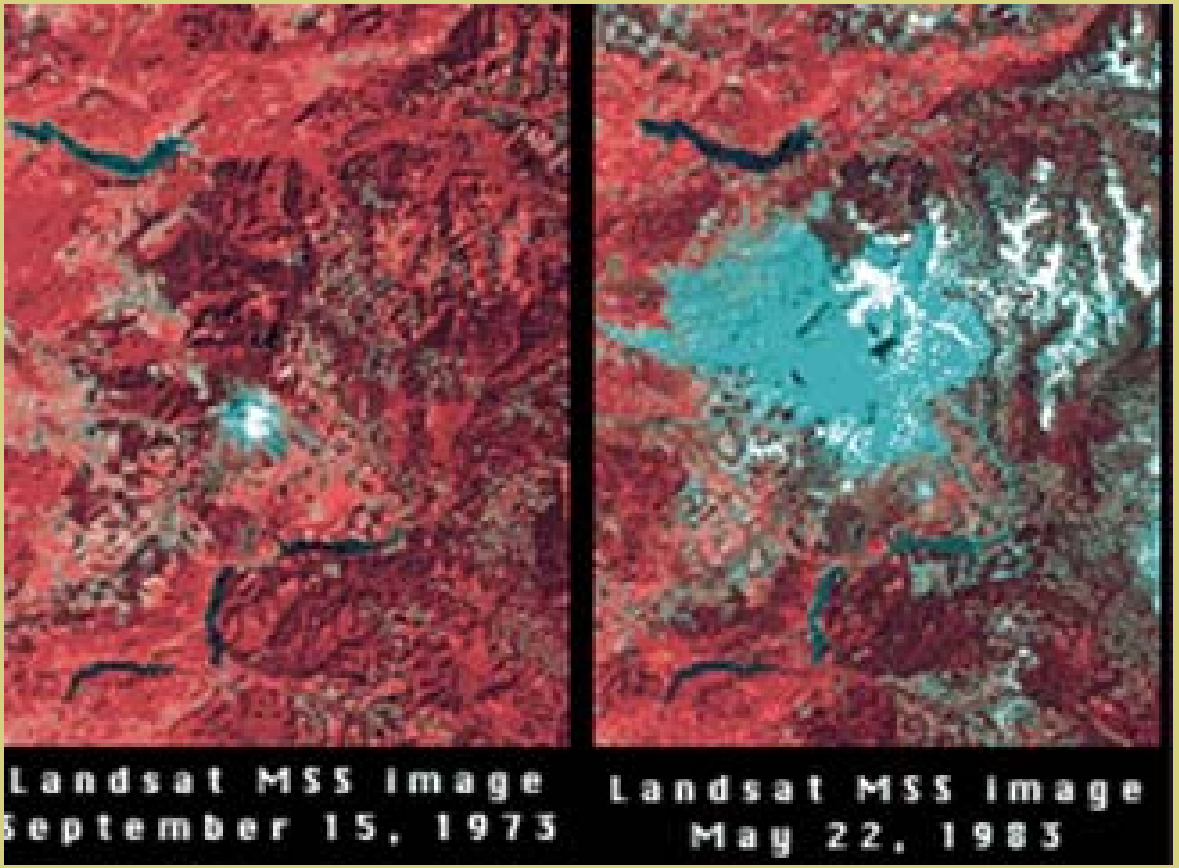
Report of Subcommittee I

Photo Interpretation Committee, American Society of Photogrammetry

CHAIRMAN, ROBERT N. COLWELL

MEMBERS, WILLIAM BEVAN, GLENN LANDIS, PHILIP LANGLEY, JOSEPH MORGAN, ARCH RINEY, J. K. ROBINSON, AND A. T. SORET

As Chairman of the American Society of Photogrammetry Committee of Photo Interpretation he brought out a fundamental publication on „Basic Matter and EnergyRelationships in Remote Reconnaissance“ (Phot.Eng.1963 pp.761-799)



Mt.St.Helens
Oregon, USA
1975 and 1985

Landsat in 1972 started the internationalization of Remote Sensing as a resource and environmental monitoring tool for the next 40 years

Analog Photogrammetry

Max Gasser 1915

Reinhard Hugershoff 1921

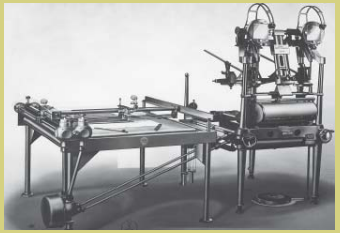
Walter Bauersfeld 1923

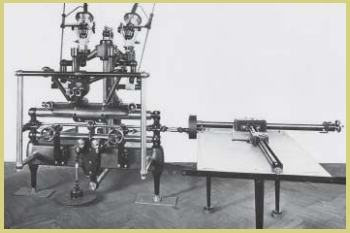
Heinrich Wild 1925

Ermenguildo Santoni, 1921

Georges Poivilliers 1922

Stereoautograph





Aerocartograph Stereoplanigraph

Umberto Nistri 1925

E.H.Thompson 1950

Gasser Projector

„Those Wild Machines“,
British King George VI enquired

In 1960 Prof. Schermerhorn wrote for the 50th Anniversary of the German Society a 50 year review of the developments of Photogrammetry :

Europa sieht man in den Jahren zwischen 1921 und 1927 ..
die Entwicklung mehrerer Präzisionsauswertegeräte. In der Schweiz arbeitete Dr. Heinrich Wild, in Italien Nistri und Santoni, in Frankreich Poivilliers, Predhumeau und Ferber. Es ist bemerkenswert, daß, soweit Ich nachspüren kann, keiner dieser Konstrukteure aus dem Vermessungswesen kommt, sondern daß sie entweder aus der Fliegerei oder als Ingenieure und Physiker zur Luftbildmessung gestoßen sind.

„In Europe we see between 1921 and 1927 the development of many precision plotters , (quoting Wild, Nistri , Santoni, Poivilliers, Predhumeau and Ferber).

As far as I find, none of these designers were survey specialists. They either came to photogrammetry from aviation or as engineers and physicists“

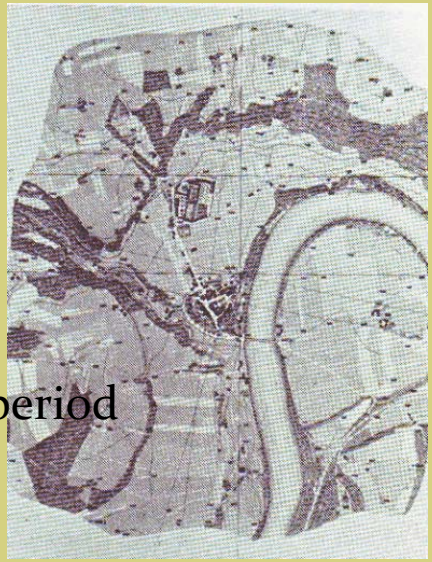
Schermerhorn´s English Abstract 1960

"The future role of (European) photogrammetry will depend on whether the great designers and pioneers of photogrammetry , personalities such as Geheimrat Finsterwalder, Hugershoff, Bauersfeld, Von Gruber, Santoni, Nistri, Poivilliers, will find successors ."

Obviously, they have, with other technologies

Analytical Photogrammetry

Sebastian Finsterwalder, Munich solved the spatial orientation of two overlapping balloon images over Gars am Inn in 1899.
He made a point by point intersection of terrain points and constructed a map . The period between imagery and the finished map was 3 years.

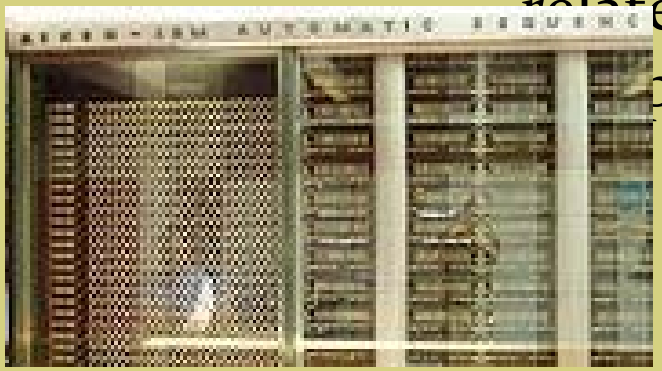


Earl Church, Syracuse N.Y. developed computational schemes for Space Resection and Space Intersection in 1934

Konrad Zuse

It needed the invention of the digital computer so that analytical methods could become operational.

Konrad Zuse developed such a computer in 1942 in Germany, as Aiken did in the USA in 1944. The progress in analytical applications of photogrammetry was directly related to the availability of powerful computers



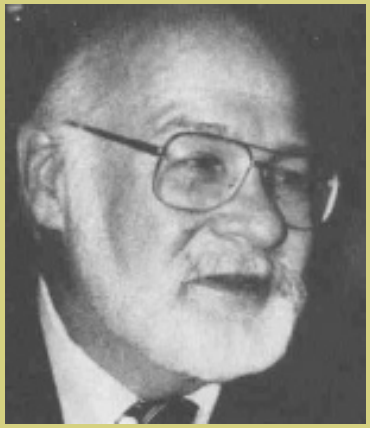
The Mark I Computer by Aiken 1944

This has applied until the present day in digital photogrammetry

Karl Rinner 1957

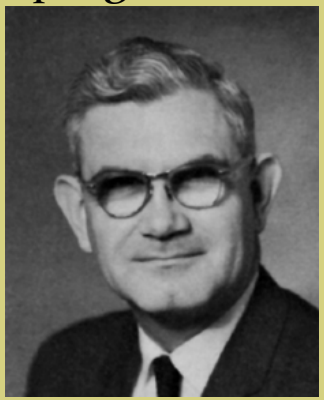
This is why Rinner preferred theoretical work including a projective solution

Helmut Schmid 1954
Least Squares Solution Approach



Duane Brown
Statistical

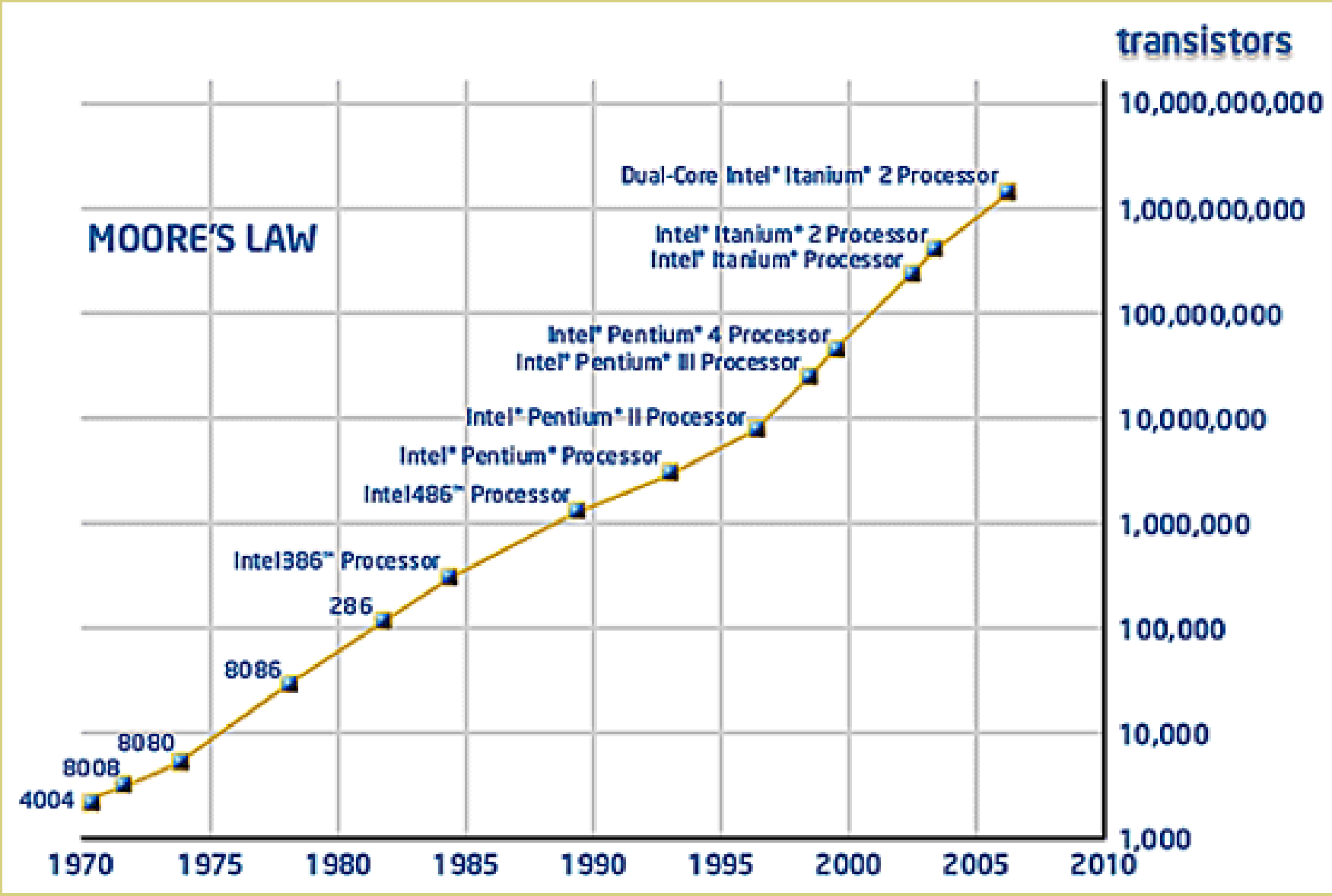
the big bundle adjustment programs originated first in the US government, where large computers were freely available



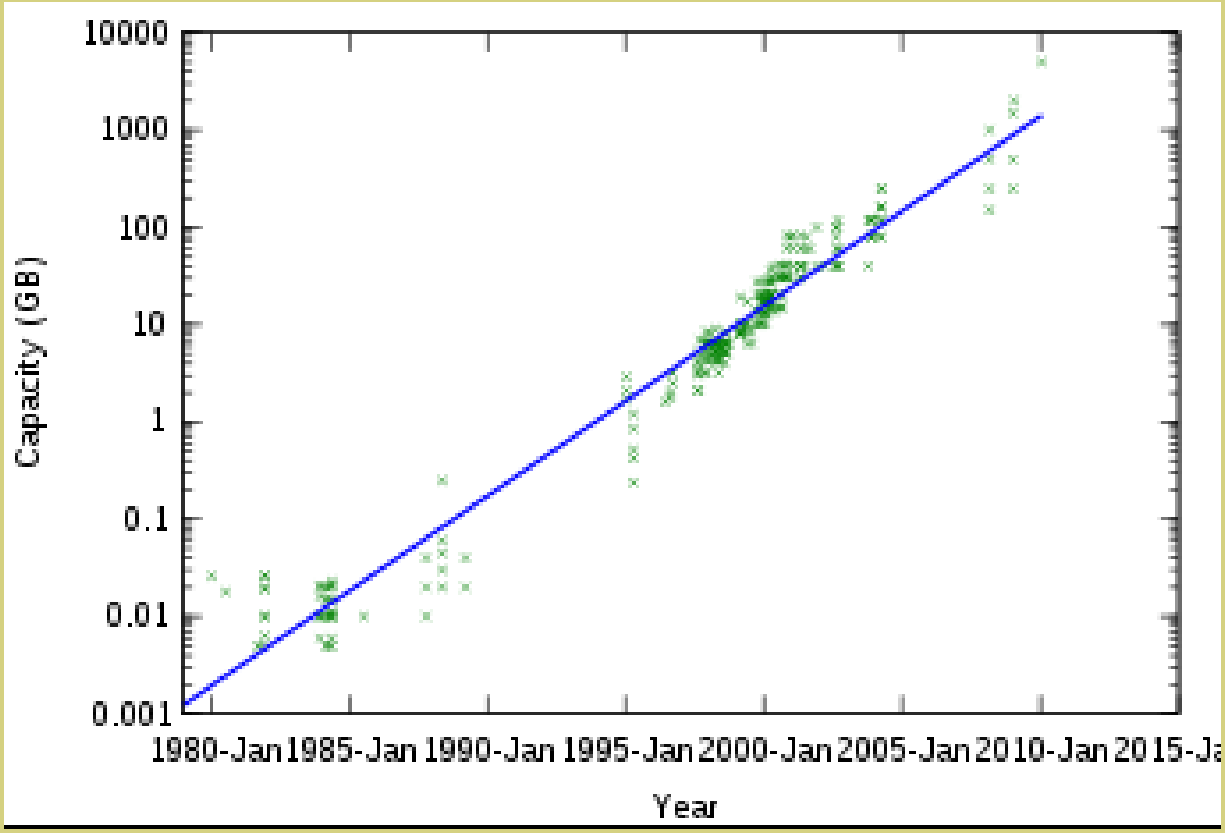
John Sharp, IBM 1964

IBM even launched Digital photogrammetry

Exponential Growth in Processor Capacity



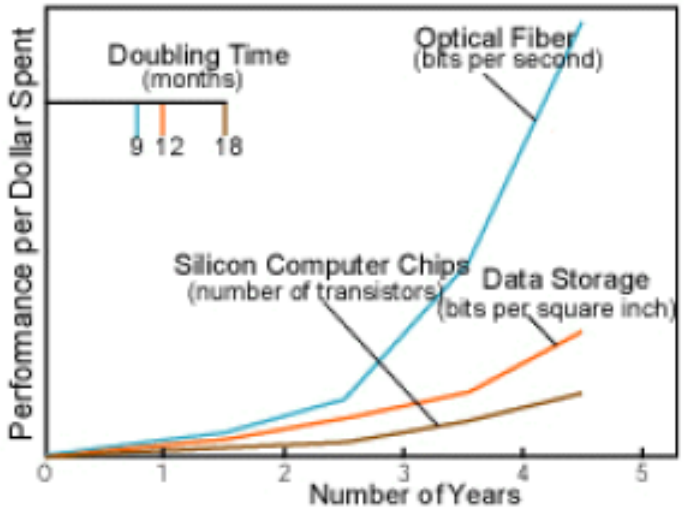
Exponential Growth of CPU Capacity



Exponential Growth in Network Performance

Network exponentials

- Network vs. computer performance
  - computer speed doubles every 18 months
  - network speed doubles every 9 months
  - difference: order of magnitude per 5 years
- 1986 to 2000
  - computers: x 500
  - networks: x 340,000;
    factor 1000
- 2001 to 2010
  - computers: x 60
  - networks: x 4000;
    factor: 100



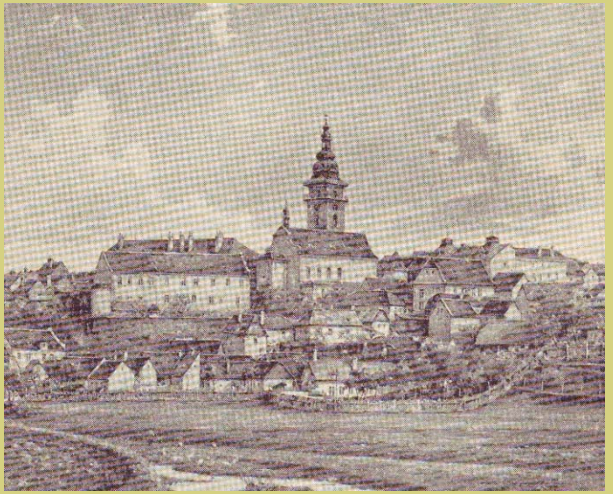
Moore's Law vs. storage improvements vs. optical improvements. Graph from **Scientific American** 2001) by Cleo Vilett, source Vined Khoslan, Kleiner, Caufield and Perkins

Based on a foundation of continuous progress in developments of computers, the tools for photogrammetry of the future are ready and they will continuously be improved.

There should therefore be no danger of extinction of photogrammetry and remote sensing, if we develop improved models and use the technology appropriately.

Eduard Dolezal, the Founder of ISPRS, had this attitude from the start, and he passed it on to us.

Eduard Dolezal´s Origins



Habsburg Monarchy of the Austro-Hungarian Empire

Emperor Franz Joseph I

in the Empire only 20% of the population spoke German as their mother language and only 20% spoke Hungarian

Birthplace: Mährisch Budwitz

(Moravské Budejovice)

His father Franz was Czech born and his mother Eleonore was German born

born in 1862 he went to German school in Mährisch Budwitz from 1868 to 1876

Dolezal´s Career

High School Graduation in Vienna in 1884

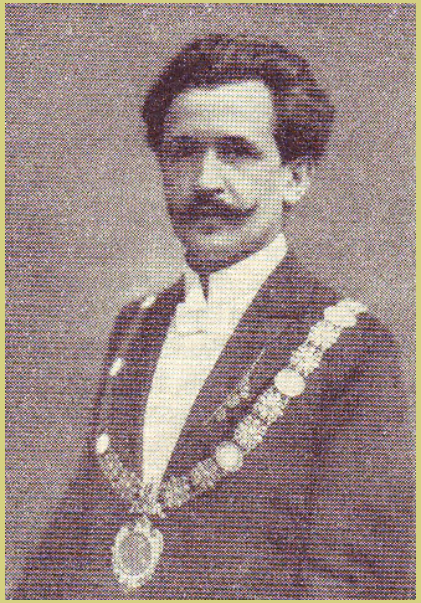
Professor at Technical Academy in Sarajevo in 1993

Professor at Mining University in Leoben in 1899

Professor at Technical University in Vienna in 1905

Meeting with Koppe, Jordan and Sebastian Finsterwalder during his travels to Germany (Braunschweig) 1897

Eduard Dolezal and his contem-poraries



Eduard Dolezal
Rector TU Vienna
1908-09

Anton Schell
Predecessor and
Teacher TU Vienna
+1909

Theodor Scheimpflug
visionary student and
colleague
+1911

R.J. Thiele, Moscow
+1911

Gustav Kammerer
collaborator of
Scheimpflug, +1914

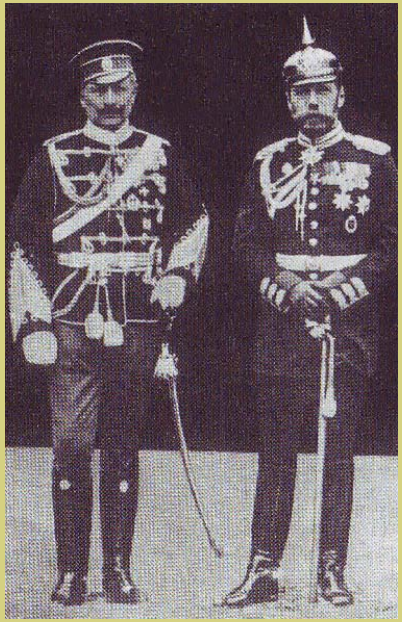
Karl Fuchs
Pressburg (Bratislava)
+1916

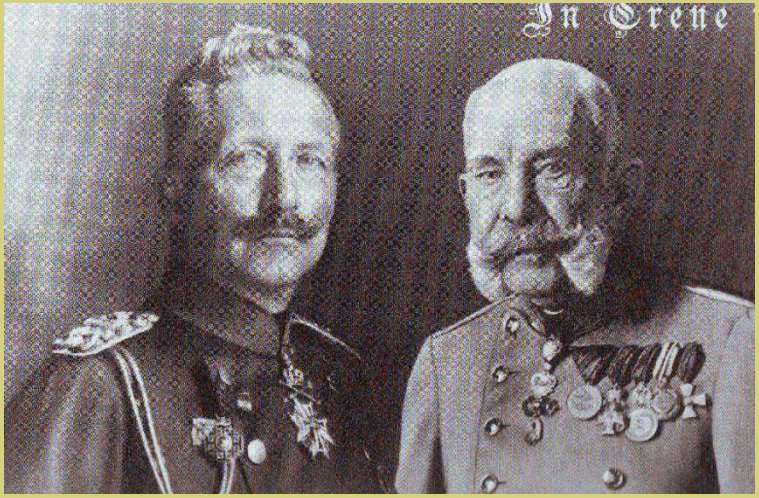
Pio Paganini
Florence
+1916

World War I was initiated by 3 cousins,
The descendants of Queen Victoria in London:
Wilhelm II of Germany
Edward VII of England and
Nicolas II of Russia

Wilhelm II of Germany needed Franz Joseph I of Austria as ally

The multinational approach of the Austro-Hungarian Monarchy gave way to nationalism





Ultimately World War I destroyed 4 Empires:
- the German
- the Austro-Hingarian
- the Russian
- the Ottoman

The Austrian Society

Eduard Dolezal
1862-1955

5.3.1907 Foundation of a Society, which after the creation of as German Section on 7.10.1909 in Jena became the Austrian Society

The German Society

„Founding Members of German Section“ on 7.10.1909 in Jena with C.Pulfrich and M.Gasser

Place of creation

The Zeiss Photogrammetric Week October 1909 in Jena

WineHouse„Göhre“

4.7.1910 Foundation of the International Society for Photogrammetry

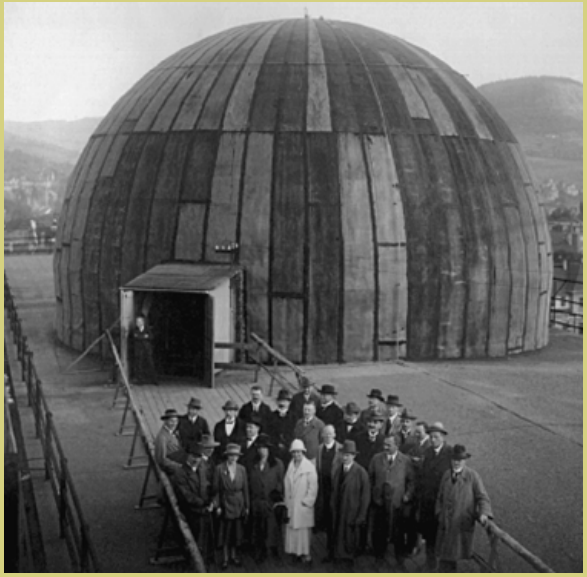
Dolezal was President from 1910-1926

1st ISP Congress in Vienna 1913

Eduard Dolezal and Baron Hübl were able to give papers in the Parliament

German Society Meeting 1922 in Jena with Pulfrich, Dolezal, Von Gruber and Gasser

Congress Site 1926 at Berlin Technical University



German Society Meeting 1925 in Jena

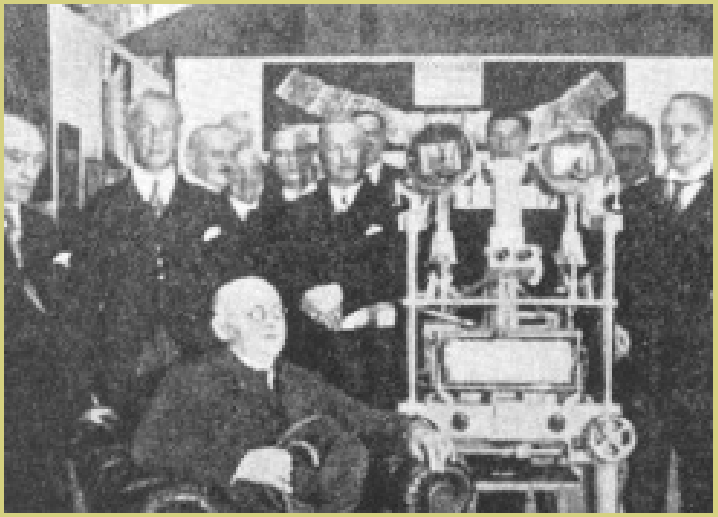
In 1922 in Jena first contacts between Dolezal and the German Society were made for planning the next Congress, which was originally supposed to have taken place in 1917.

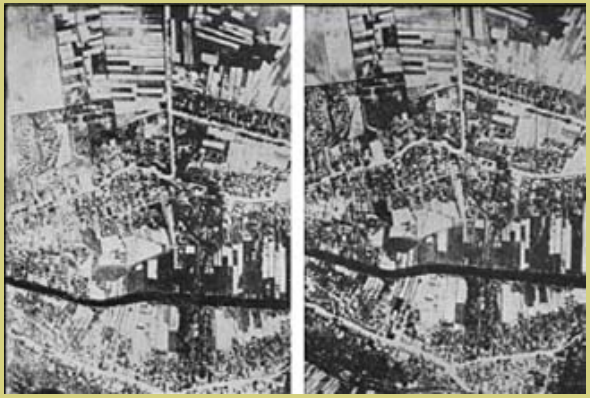
In 1925 the decision was made to host the 2nd Congress in Berlin

The 2nd Congress 1926 in Berlin

The Congress was held at the
Technical Univers ity in Berlin-Charlottenburg
with Prof. Otto Eggert as host
and President 1926-1930
Dolezal became Honorary President

during the Congress Exhibit
Carl Pulfrich of Carl Zeiss
showed his Planigraph

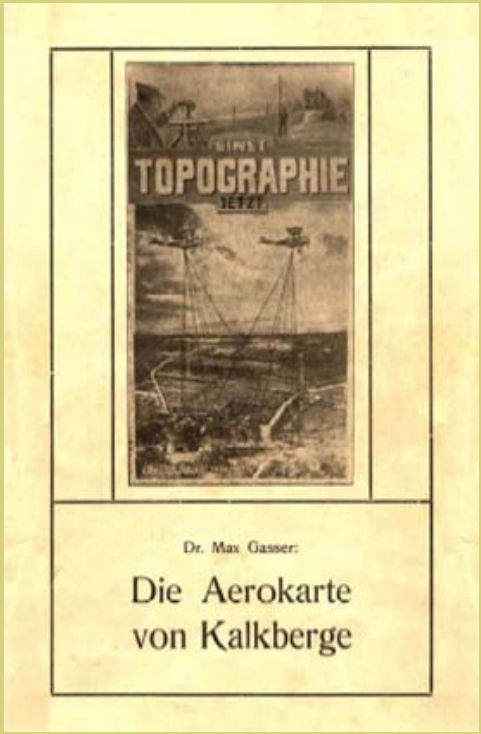


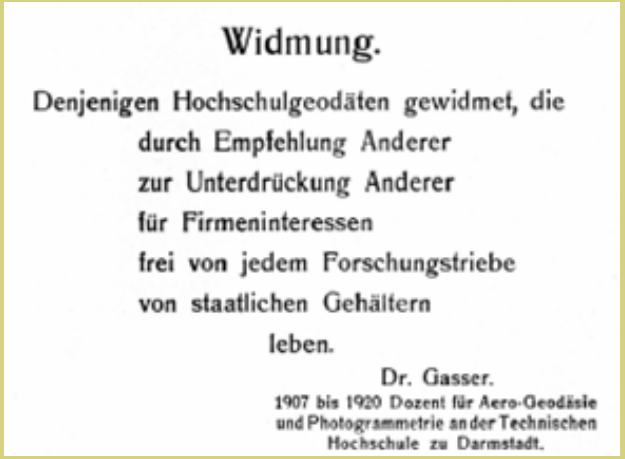


Max Gasser invented the Gasser Projector (Multiplex) in 1915, for which he obtained a war patent.

1925 the Zeiss Company made the Stereoplanigraph

Gasser made a restitution of two stereo images taken from the Zeppelin over Kalkberge.





He published a book and dedicated it to those

„University Geodesists, who by recommendation of others, for oppression of others, for company interests, free from research motivation, live from salaries of the Government“

Sachverständigen-Gutachten zum Prozess Inag contra Optikon

So kompliziert die Apparate sind, auf welche sich der vorliegende Rechtsstreit bezieht, so einfach scheint mir die für die Juristen in Betracht kommende Sachlage zu sein, welche nach den materiell übereinstimmenden Angaben beider Parteien wie folgt gekennzeichnet werden kann:

Vorbekannt war:

1. Die Methode, um aus **einer** photographischen Geländeaufnahme Ort und Orientierung des aufnehmenden Apparates zu finden, wenn die wahren Orte dreier Punkte des photographierten Geländes bekannt waren.

2. Methoden und Mittel zu Rekonstruktion der Formen des Objektes durch zentrales Projizieren der einzelnen Punkte zweier photographischer Aufnahmen, wobei die Platten abgesehen von ihrer Entfernung in diejenige relative Lage gebracht werden, welche sie bei den Aufnahmen hatten.

Gasser hat mit seinem Patent als **erster** eine Apparatur geschaffen, welche **durch Kombination beider Methoden** ermöglicht und bezweckt, Gelände-Relief-Karten **aus zwei vom Flugzeug aufgenommenen Photographien** herzustellen.

Er hat ferner als **erster** die erstmalig kombinierte Methode praktisch brauchbar gestaltet und hat mit seinem Zusatzpatent als erster die Methoden durch optische Einrichtungen verbessert, welche das gleichzeitig optische Anvisieren der Bilder entsprechender Geländepunkte durch eine Person ermöglicht.

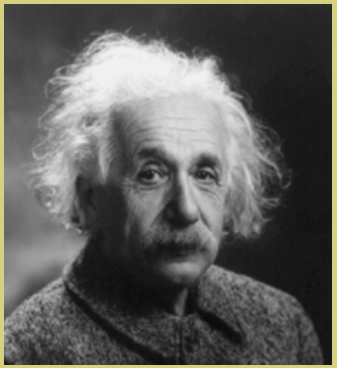
In diesem Sinne ist das Gassersche Patent ein **Pionierpatent** und es unterliegt nach meiner Ansicht keinem Zweifel, daß die von der Beklagten hergestellten Apparate in den Schutzbereich des klägerischen Patentes fallen. Bei dieser Sachlage erscheint ein Eingehen auf Details überflüssig.

A. Einstein

Albert Einstein, a Patent specialist from Bern, Switzerland was asked in 1923 for a judgement on Gasser´ s patent.

He certified, that Gasser was the first to orient two overlapping images relatively and absolutely and to use them thereafter for spatial reconstruction.

He considered Gasser´ s work a Pioneer Patent.



den 1.März 1948

Dr.Max Gasser
Moltkestr.7
München-Pasing
Bayern,Deutschland

Sehr geehrter Herr Gasser:

Ich erhielt Ihren Brief vom 4.Februar. Es war gut,dass Sie die Photo-Copie beilegten, sonst hätte ich mich an meine frühere Aeusserung in Ihrer Angelegenheit nicht mehr erinnert. Sie müssen sich trösten mit Schiller's Worten: "Und Gerechtigkeit ist nur auf der Bühne". Jedenfalls ist sie nirgends, wo die Politiker und Juristen den Gang der Dinge verfolgen. An den Illusionen,die Sie über die geschäftliche Moral des Auslandes haben, sehe ich,dass Sie nicht viel herumgekommen sind. Wenn das Geld in Frage kommt,ist die Bestie überall gegenwärtig. Bei meiner völligen Zurückgezogenheit fehlt es mir an Möglichkeiten, auf Ihre Priorität in der Sache aufmerksam zu machen. Es würde wohl auch wenig helfen, den jeder ist hinter seinen Spatzen her.

Mit vorzüglicher Hochachtung

Albert Einstein.

When Gasser addressed a letter to him in 1948, after he apparently had had no success with the authorities,

Einstein answered, quoting the German Poet Schiller:
„Justice is a myth, which only exists in the drama, and this is so all over the world, as self interest takes priority“

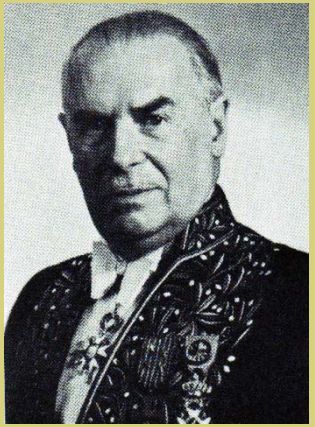
3rd Congress 1930 in Zürich

Fridolin Baeschlin
Geodey Professor
ETH Zürich

Heintich Wild, who left
Zeiss in Jena in 1923 supported
the Congress with his new company
Wild-Heerbrugg

4th ISP Congress 1934 in Paris

Louis Hurault
G. Perrier (President)
1930-1934



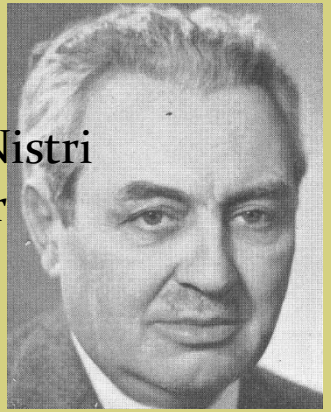
Georges Poivilliers
instrument designer

of

5th ISP Congress 1938 in Rome

Gino Cassinis
Professor
Politecnico di Milano
President
1934-1938

Umberto Nistri
instrument designer



the Rome Congress took place at the time the Munich treaty over Czechoslovakia with many participants leaving early

World War II

Dunkirk after air attack

World War II became a prime application for mapping.

Areas, which have never been adequately mapped before were rapidly covered. Already mapped areas obtained recent multiple coverages with all war parties involved.

After World War II Germany had no aviation rights.

General Dwight D. Eisenhower doing some military aerial reconnaissance

Otto Von Gruber and Willem Schermerhorn

Otto Von Gruber
1884 – 1942

»Professor Dr. Otto von Gruber ist eingehend zu belehren und zu verwarnen. Es ist ihm eindringlich klar zu machen, das von einem Mann in seiner Stellung eine positive und vorbildliche Haltung erwartet werden muss. Es wird ihm eröffnet, dass er mit schärfsten staatspolitischen Maßnahmen und eventueller Unterbringung in ein Konzentrationslager zu rechnen hat, falls er künftig nochmals durch seine passive Resistenz amtliche Anordnungen zu sabotieren versuchen sollte.«

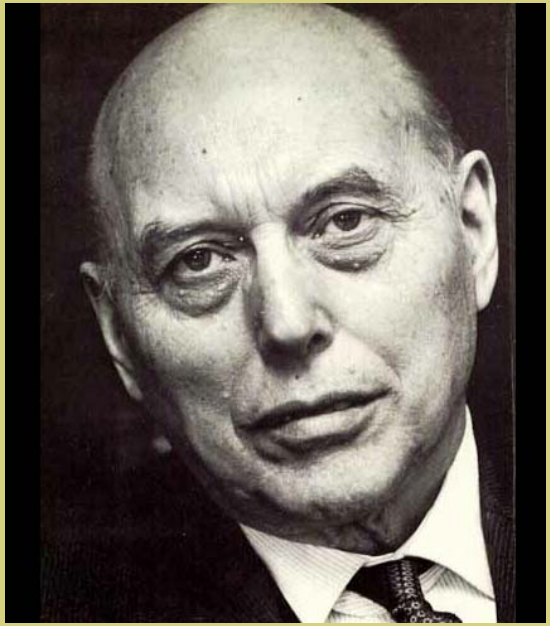
Geheime Staatpolizei Weimar (Az. II A-B Nr. 2324/29)

Secret Police (GESTAPO) in a note on Otto Von Gruber:
„Von Gruber is to be warned that he will have to be sent to a Concentration Camp, if he does not give up his passive resistance to following orders“
(AZ II A-B No. 2324/29)

Willem Schermerhorn
1894 - 1977

Willem Schermerhorn was his collegue and friend. Schermerhorn was sent to a Concentration Camp in 1944. After being dismissed, he joined the Dutch Resistance. In 1945 he became the first Post War Prime Minister of the Netherlands

6th ISP Congress 1948
in Scheveningen, Netherlands



Willem Schermerhorn
Professor, Technical University Delft
President ISP 1938-1948

He organized the Congress following a delay of 6 years due to World War II

At that time Germany could not officially participate

but E.O. Messter of Munich, son of Oskar Messter, the inventor of the aerial survey camera of 1915 was able to represent German photogrammetrists due to his Liechtenstein citizenship.

7th ISP Congress 1952 in Washington D.C, USA

The Congress took place at the Shoreham Hotel with ISP President 1948-1952 O.S.Reading (first row, white suit)

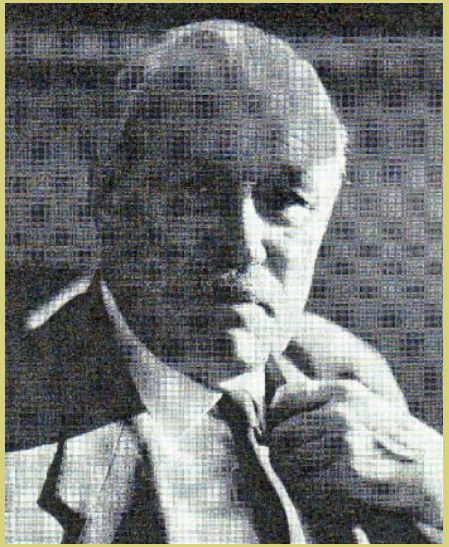
Germany was readmitted into ISP (head of delegation was Richard Finsterwalder, the President of the German Society first to the left, beside him front row is Bertil Hallert, Sweden,)

8th ISP Congress 1956 in Stockholm

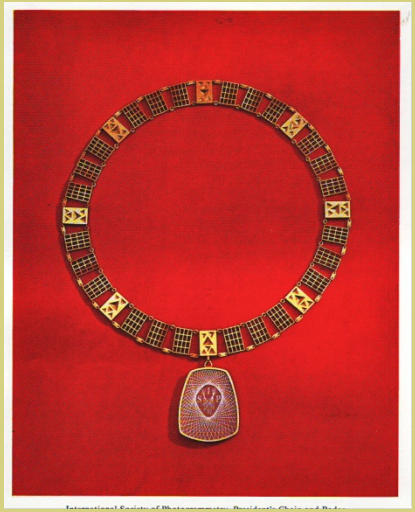
President 1952-1956: P. Mogensen
Secretary General: P.O. Fagerholm
Professor of KTH, Bertil Hallert

9th ISP Congress 1960 in London

President 1956-1960: General R.Ll.Brown
Brigadier Prof. E.H.Thompson
Martin Hotine Univ. College London



10th ISP Congress 1964 in Lisbon



The British Society for Photogrammetry donated a Chain of Office to ISP

President Paes Clemente (1960-1964) was the first to wear the Chain of Office

11th ISP Congress 1968 in Lausanne

Professor Bachmann, the host at EPFL opened the exhibit with President Härry (1964-1968) (4th from left) and President Solaini (1968-1972) (3rd from left) attending

12th ISP Congress 1972 in Ottawa

Congress Director and President (1972-1976) Sam Gamble opened the Congress

the National Exhibit

the first Landsat images (W.Fischer)

Buffalo Barbeque in Gatineau

13th ISP Congress 1976 in Helsinki

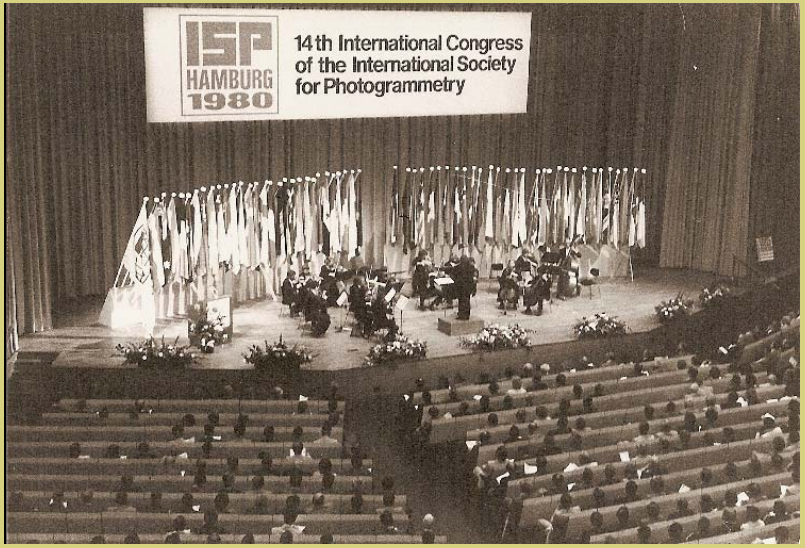
Finland donated the first ISP Flag to the Society. The designated Congress Director Halonen died before the Congress, thus the organizational task had to be shared

Prof. Halonen General Löfström Prof. Einari Kilpelä

Open Air Festival (Aino Savolainen) in Seurasaari; Congress Hall Techn. Univ.

14th ISPRS Congress 1980 in Hamburg

1980 Congr. Director Konecny; President Jean Cruset (1976-1980)



President
Fred Doyle
(1980-1984)

President
Gottfried Konecny
(1984-1988)
1988 Congr. Director
Shunji Murai

15th ISPRS Congress 1984 in Rio de Janeiro

1984 Congr. Director
Placidino Fagundes

At the 1980 Hamburg Congress we wanted China to become a new ISP Member.

The Chinese Taipei Society had already been a member, but was not able to represent Beijing.

We changed our Statutes to admit „Countries and Regions thereof, which have an Independent Budget“, so that both societies could be Members.

Prof.Shi, Tainan; Fritz Ackermann, President DGPF; Prof. Wang Zhizhuo, Wuhan; Mr. Li, Beijing

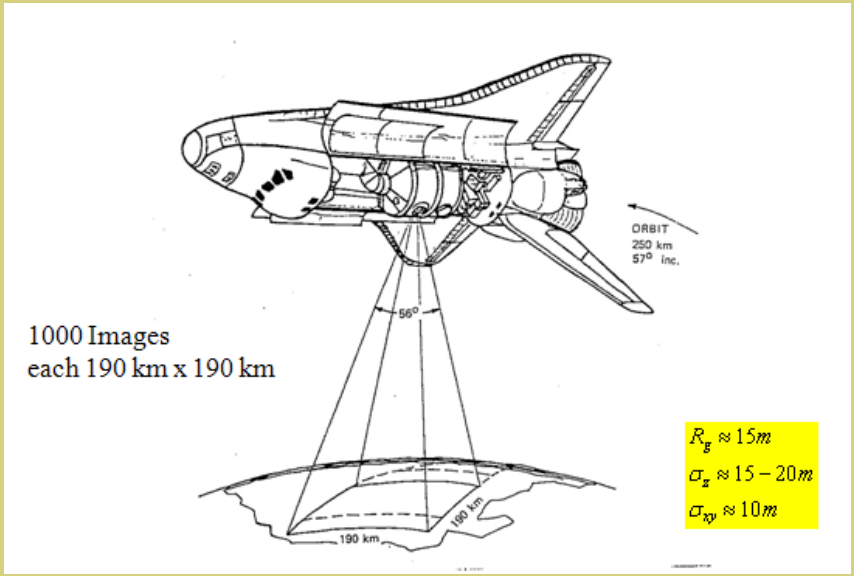
Maybe ISP(RS) was 10 years ahead of the times, but our decision worked well

The Chinese Delegation at the Paris Congress 1934

In 1983 ISPRS had 2 Members of Council, who had difficulties to travel to the Sovjet Union, when we were invited to hold a Council Meeting in Minsk
(George Zarzycki and Hans Jerie)
see below

On the other hand,
Ivan Antipov, see above
our host in Minsk,
could not travel to
West Berlin, where we had
an alternate invitation.

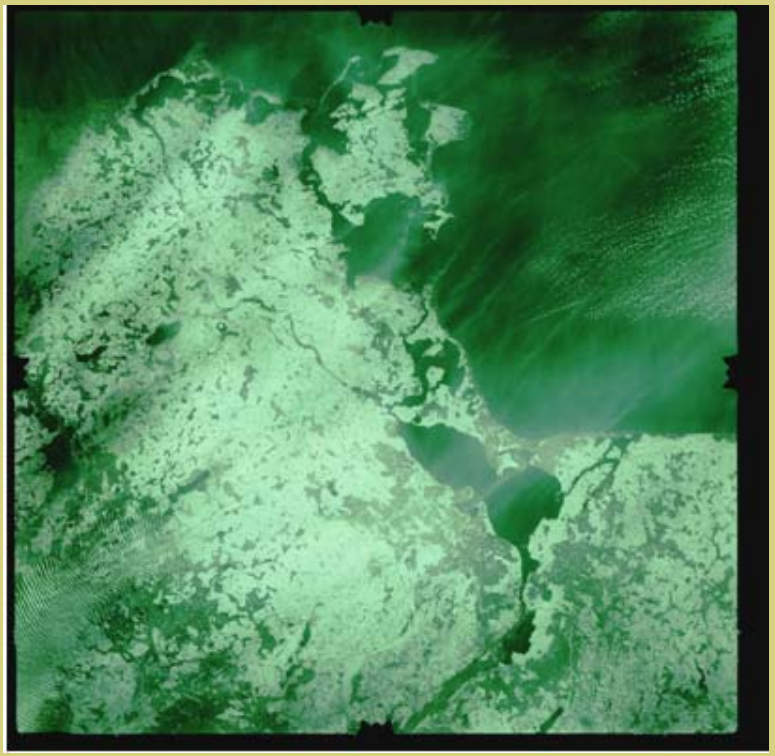
We held both meetings.



Project Scientist: Gottfried Konecny, University Hannover
Project Engineer: Manfred Schroeder, DLR-Oberpfaffenhofen
Project Manager: Arndt Langner, DLR-Cologne
Industrial Contractor: T. Miski, ERNO, Bremen
K Meier,C.Zeiss, Oberkochen
ESA-Project Coordinator: Mike Reynolds, ESTEC, Nordwigk
ESA-Metric Camera Working Groups
Gottfried Konecny, University Hannover, Chair
Jan Dowmann, University College, London
Guy Ducher, IGN, Paris
Giovanna Togliatti, Politecnico, Milano

In 1983 the German Government and ESA financed the „Metric Camera Experiment“ from Space Shuttle, networked with ISPRS individuals

10% of the earth´s land mass was covered in stereo in the 9 day mission

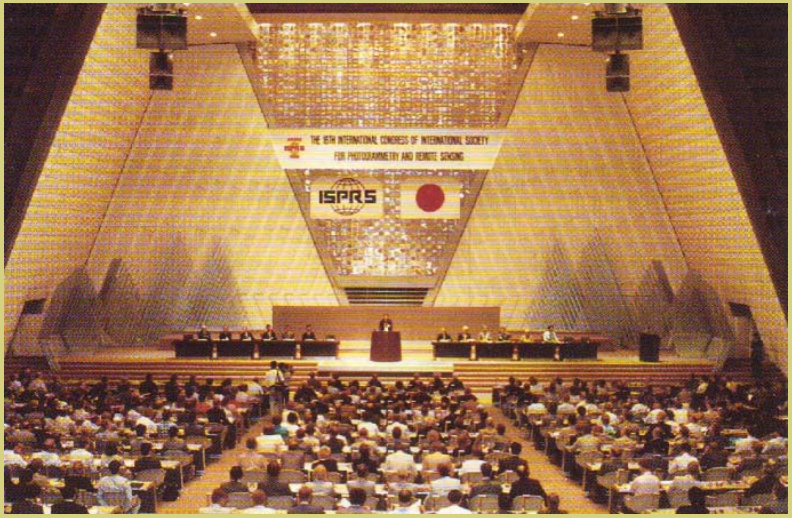


the film was developed at DLR or IGN. A beautiful strip was taken over the GDR. The Government, not wanting to admit that imagery had been taken over a socialist country, did not include the images in the catalogue.

Instead, copies of these images were taken informally to our ISPRS friends in the GDR by car

the favourable response came later in 1987, when ISPRS was brought to Leipzig for a meeting, where the collegues of the Sovjet Union (Kienko and Drazhniuk) openly showed us their KFA 1000 images.

16th ISPRS Congress 1988 in Kyoto



Opening in the Kyoto Congress Center

President Kennert Torlegard 1988-1992

17th ISPRS Congress 1992 in Washington

Congress Director Larry Fritz 1992

President Shunji Murai 1992-1996

Election of Honorary Members at the Kyoto Congress 1988

Wang Zhi Zhuo, Aino Savolainen, Fred Doyle

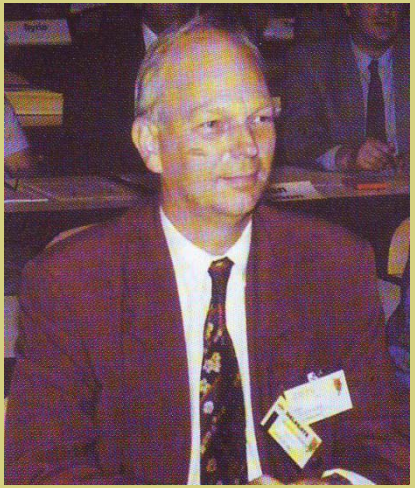
18th ISPRS Congress 1996 in Vienna

Congress Director
Karl Kraus

Congress Opening in the Vienna Hofburg (Hofrat Neumaier & Ms. Kraus)

19th ISPRS Congress 2000 in Amsterdam

Congress Director
Klaas Jan Beek



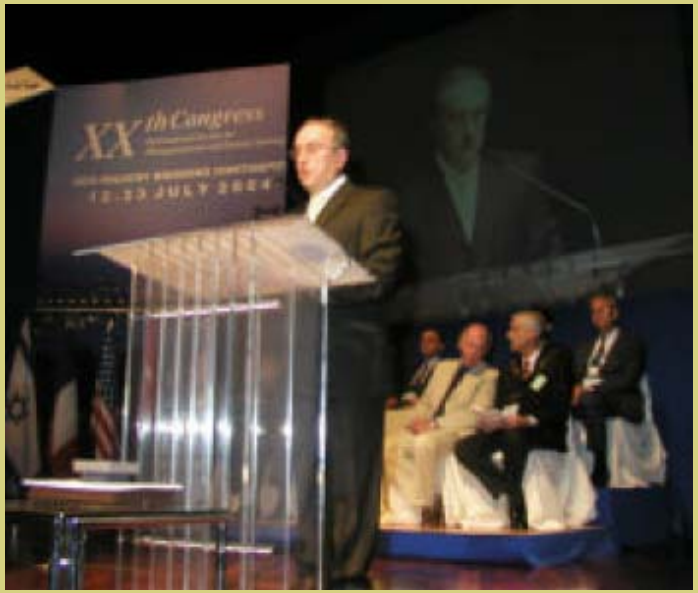
Program Chair
Marteen Molenaar

Some Memories from Vienna 1996:

Karl Kraus said in 1992:
„there are 10 reasons, why the 1996 Congress should go to Vienna again after 83 years, and one of them is Karl Kraus“.
Some of the other reasons are shown below:

- Johann Strauss Music in the Hofburg
- Dance in the Rathaus
- Party at Schloss Grafenegg

20th ISPRS Congress 2004 in Istanbul



Congress Director 2004
Orhan Altan

President (2000-2004)
John Trinder

Congress Center

Fashion Show in Dolmabahce

Gamble Award to V.P.Savinych

21st ISPRS Congress 2008 in Beijing

Congress Director 2008 Chen Jun
National Society President Yang Kai

President (2004-2008) Ian Dowman
President (2008-2012) Orhan Altan

Congress Center

Commission Presidents 2004-2008

Council 2004-2008

22nd ISPRS Congress 2012 in Melbourne

Cliff Ogleby, Congress Director

25 August – 1 September 2012
Melbourne Convention and Exhibition Centre, Melbourne, Australia

Imaging a sustainable future
ISPRS 2012 Melbourne Australia

The Brock Gold Medal Winners

Bertele
1956

Schermerhorn
1960

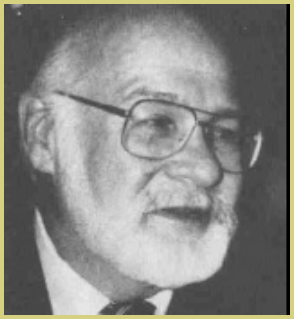
Schmid
1968

Helava
1972

Ackermann
1976

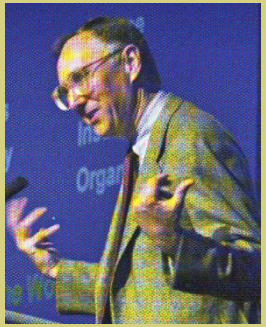
Hobrough
1980

Doyle
1984



D. Brown
1988

Tjuflin
1996



Dangermond
2000

Kasturirangan
2004

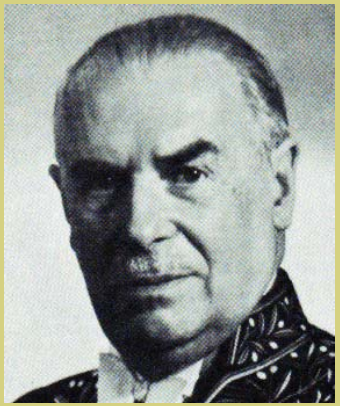
Gruen
2008

photo missing of Brachet 1992

Honorary Members

Dolezal
1926-1955

Von Orel
1938-1941



Poivilliers
1948-1968

Baeschlin
1952-1961

Nistri
1952-1962

Santoni
1952-1970

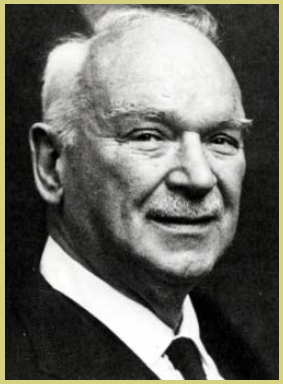
Schermerhorn
1952-1986

O.S.Reading
1952-1984

Bauersfeld
1956-1964

Cassinis
1956-1964

Honorary Members

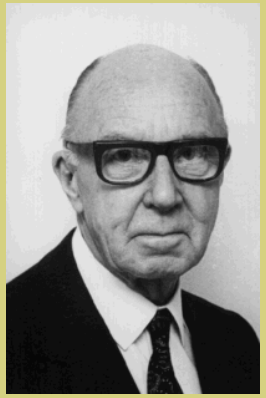


Härry
1956-1973

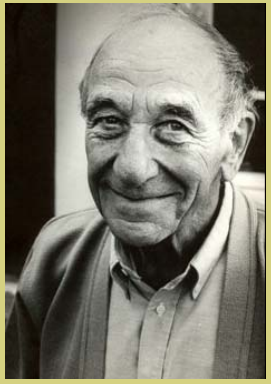
Hurault
1956-1973

Schwidefsky
1972-1986

Thompson
1972-1976



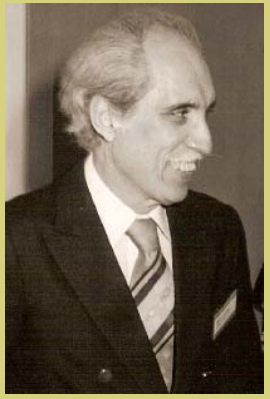
Löfström
1976-1984



Masson d´Autume
1976-2006

Cruset
1980-1994

Solaini
1980-1989



Fagundes
1984- 1996

Wang
1988-2002

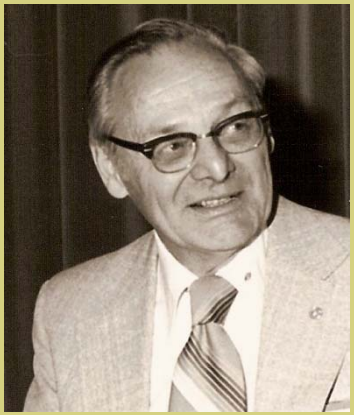
Honorary Members

missing are images of

-Mogensen, Sweden 1956-1969

-R.Ll.Brown, UK 1960-1983

Honorary Members



Doyle 1984

Savolainen 1988

Konecny 1992

Ackermann 1996

Murai 2000

Fritz 2004

Gruen 2008

Trinder 2008

What is ISPRS?

a Strong Network

working in
Working Groups
(Banff 2005)

working in
Commission Symposia
(Tokyo 2006)

Working through their Regional Members with Annual Meetings

such as
Asian Association of Remote Sensing

or
European Association of Remote Sensing Laboratories

or also: African Association of Remote Sensing

and: Latin American Society of Remote Sensing

Or as NGO in cooperation with UN Agencies

e.g. UNOOSA Vienna

Or at National Meetings

e.g. Celebrations for the
100th Birthday of
Prof. Wang Zhizhuo in Wuhan

e.g. at GEOSIBIR
in Novosibirsk
Russian Federation

In Dubai with GIS Center Director Al Zaffi and Vanessa Lawrence, CEO of Ordnance Survey

In Stuttgart with Cornelia Glaesser, President of German Society

Or at special Conferences

e.g. Map Middle East

e.g. Events of the German Society for Photogrammetry, Remote Sensing and Geoinformation

This is the confirmation, that after 100 years our philosophy is still the same:

1. Photogrammetry and Remote Sensing are an independent engineering discipline providing spatial information to the society via images

2. We need continuous input from the sciences and other engineering disciplines, but the exponential growth in computer performance guarantees our growth

3. Society needs our services, which only we can provide because of our professional interest.

What are then the problems our disciplines are facing?

The problems are sociological in nature:

1. do we have political support?
2. do the laws sufficiently protect our professional interests?
3. what is the esteem scientists and engineers have in society?

If we are not sufficiently heard, what are the altermatives for us?

1. to get engaged in social, economic, political and ultimately ethical issues issues

2. who can give us guidance in our approach to solve problems in integrating photogrammetry and remote sensing into a greater context?

Questions we need to answer

1. what do we know? what are our limitations (Kant)
   (Socrates: „I know, that I know nothing“)

2. what are our values? (religion, philosophical ideas)

3. how do we interrelate with society? (Epicure versus Marx)

4. how do we achieve
   - sustainable development (UNCED Rio 1992)?
     by good governance?
   - sustainable happiness (where is paradise)?
     by moral standards?
   - a sustainable world (environment, peace)?
     by tolerance?

possible answers

1. We are too busy and do nothing (present Western society), when problems arise there is dispair

2. We take our answers from our religious beliefs (for dogmas, there may be lack of tolerance and conflict)

3. We take advice from philosophers (they analyzed it all, but they are unable to tell us what to do)

4. So we must find our own answers

In retrospect, the answer is simple:

1. We should not be, what the Germans call a „Fachidiot“, and what Google translates as „Professional Idiot“, we need to look across the „fence“

2. We should focus our work on society´s needs, the environment, world poverty, world peace

3. We should communicate our possible contributions to those who need to know

   - our polititians
   - the professional elites
   - the public

4. Society will alwys criticize what you say, but not, what you do