

HISTORY OF THE INTERNATIONAL ASSOCIATION OF GEODESY

prepared by Charles WHITTEN

former President of SSG 0.67 "History of Geodesy"

The 1980 Geodesist's Handbook contains a very detailed note on the "History of the International Association of Geodesy" prepared by J.J. Levallois, Honorary General Secretary. Then the 1984 Geodesist's Handbook contains brief biographical memoirs of former Presidents and General Secretaries of the Association. In an effort to make this collection more complete, the Special Study Group 0.67 has prepared similar memoirs for three Presidents of the old Association : Ibanez from Spain (1886–1891), Faye from France (1892–1902) and Bassot from France (1903–1917).

This report also contains concise bio-reference notes for deceased former Section, Commission and Special Study Group Officers as well as other geodesists who have made significant contributions. The reader will note that some of these are incomplete – missing dates of birth or death, missing country, city, institute, etc.. Also, undoubtedly there are others who should be included. Your assistance is urgently sought to help us make this list more accurate. Please send the corrections and additions to :

Dr. B. Chovitz,
President SSG 0.67

On the last page of this report we have identified the geodesists who have had the primary responsibility for the I.L.S. and the B.I.H. We are suggesting that consideration be given to preparing a very complete history of these two services after the new service is instituted. This effort should be a joint project – I.A.G. and I.A.U. Preliminary discussions were held with Dr. Dennis McCarthy of the U.S. Naval Observatory. He is active in both international bodies and could assist in organizing this cooperative project.

1. Presidents of the former International Geodetic Association

. Carlos IBÁÑEZ (1825–1891).



President of die Internationale Erdmessung (The International Geodetic Association) from 1886 to 1891.

Born in Barcelona, Spain, 14 April 1825; died Nice, France, 28 January 1891. In 1839 he entered the Academy of Army Engineers receiving training in both military and scientific subjects. He developed a keen interest in geodesy while teaching at the Academy. In 1853 he joined a newly created commission specifically established to prepare a national map for Spain. At his initiative the Census and Geographic Institute was established in 1870. He was its first director.

General Ibáñez was responsible for planning and measuring the large quadrilateral of triangulation crossing the western end of the Mediterranean connecting Spain with Algeria. Observations were made between the peaks of Mulhacén and Teticas in Spain and Filhaoussen and M'Sabiha in Algeria. It is one of the classic examples of long geodesic lines. Ibáñez reported on the completion of the project at the General Conference of the Association held in Munich in 1880. A few years later he was awarded the title Marquis of Mulhacén in appreciation of this historic work. In addition to his active participation in the geodetic association, he took part in the formation of the International Bureau of Weights and Measures in Paris serving as its first president.

. Hervé, Etienne, Auguste, Alband FAYE (1814–1902).



Président de l'Association Géodésique Internationale de 1892 à 1902.

Né le 1^{er} Octobre 1814 à Saint-Benoit du Sault (Indre), il entre à l'Ecole Polytechnique en 1832. Après quelques difficultés politiques, qui lui valent un court emprisonnement, il est appelé par Arago à l'Observatoire de Paris où il entre en 1841 et où va se dérouler la suite de sa carrière. Il s'y distingue bientôt, découvre la petite planète qui porte son nom et consacre une partie de ses études aux comètes et à la force répulsive qu'exerce le soleil sur leur queue.

Il est élu au Bureau des Longitudes (dont il deviendra président) et est élu membre de l'Académie des Sciences en 1847, âgé de 33 ans.

Son rôle est essentiel pour le développement de la géodésie française :

- un des tout premiers, il souligne l'importance des mesures gravimétriques, étudie leur réduction, propose la correction à l'air libre (correction de Faye), montre l'intérêt de la mesure des déviations de verticale et de leur étude,

- il est le principal inspirateur du programme de 1864 présenté par le Bureau des Longitudes qui préconise :

- a) d'étudier et calculer l'influence des attractions locales sur la verticale,
- b) de vérifier les parties douteuses de la méridienne de Delambre et de reprendre les déterminations de longitudes astronomiques par télégraphie,
- c) de comparer les étalons de longueur des différents pays,
- d) de maintenir un contact étroit entre théoriciens et géodésiens de terrain.

- il encourage vivement **F. Perrier** pour la reprise en France des travaux de triangulation et intervient dans ce sens auprès des autorités,

- il présente un rapport très favorable à l'adhésion de la France à l'Europäische Gradmessung, ancêtre de l'Association Géodésique Internationale (1863).

Il présidera l'Académie des Sciences en 1872, sera élu à la présidence de l'Association Géodésique Internationale en 1892 qu'il exercera jusqu'en 1902.

Esprit universel, travailleur acharné, on compte de lui des centaines de notes aux comptes rendus de l'Académie des Sciences sur de nombreux projets d'astronomie, d'astrophysique naissante, de géodésie, etc ...

. Général Jean, Antonin, Léon BASSOT (1841–1917).



Président de l'Association Géodésique Internationale de 1903 à 1917.

Né le 6 Avril 1841 à Renève (Côte d'Or), il entre à l'Ecole Polytechnique en 1861 et sort dans le corps d'Etat Major dont dépendait à cette époque le Dépôt de la Guerre chargé des opérations topographiques et géodésiques de la carte de France, dite de l'Etat-Major. Il y est affecté en 1870 pour participer aux observations de la Nouvelle Méridienne de France dont **F. Perrier** venait d'obtenir la reprise. Fait prisonnier au cours de la guerre franco-allemande de 1870, il est interné à Hambourg. A son retour (1871), il reprend les observations de la méridienne dont il prendra la direction à la nomination de **F. Perrier** comme Directeur du Service Géographique de l'Armée.

Il participe à la célèbre jonction Espagne–Algérie de 1878.

Il est nommé chef de la Section de Géodésie en 1882 et prendra en 1898 le

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commandement du Service Géographique de l'Armée. Il prend sa retraite en 1903, et sera nommé Directeur de l'Observatoire de Nice.

Membre de l'Académie des Sciences en 1893 (section de géographie et navigation), sa carrière s'est déroulée uniquement comme géodésien ou astronome.

Il s'est occupé, en dehors de ses activités initiales d'observateur :

- d'organiser et poursuivre la géodésie en Algérie,
- de développer en France la nouvelle triangulation,
- d'organiser et contrôler les observations du nouvel Arc du Pérou.

Il fut élu, en 1903, *président de l'Association Géodésique Internationale* à l'Assemblée Générale de Copenhague et fut réélu en 1911 à celle de Hambourg, lieu de sa captivité en 1870–1871.

2. Deceased former Section, Commission, Special Study Group officers and other geodesists who made significant contributions

(in brackets biographical notice published).

AIRY, Sir George Biddell (1801–1892).

England, Greenwich Observatory
Astronomy, Isostasy.
[EnBr].

ANDERSEN, Einar (1905–1987).

Denmark, Copenhagen, Geodetic Institute
Classical geodesy
Treasurer, I.U.G.G. (1960–1971).
[Bulletin Géodésique, 61–4, 1987].

ANDOYER, Henri (1861–1929).

France, Paris
Astronomy.
[Bull. Geod. 1929, pp. 120–124].

ASPLUND, Lars (1914–1987).

Sweden, Stockholm, Rikets Allmänna Kartverk
Control surveys, Land surveys
Pres. Sect. I, Geometrical Determination of Positions (1967–1971)
2nd Vice-Pres. I.A.G. (1971–1975)
[Bulletin Géodésique, 61–2, 1987].

BAETSLE, P. L. (1909–1983).

Belgium, Bruxelles, Univ. of Bruxelles
Mathematical geodesy
Pres. Sect. I, Control Surveys (1971–1975)
2nd Vice-Pres. I.A.G. (1975–1979)
[Bull. Geod. 58–1, 1984].

BAMBERG, Carl (1847–1892).

Geodetic instruments
[ZfV, 1927, 495–6].

BANACHIEWICZ, T. (1882–1954).

Poland, Cracow, Observatory
Astronomy, Mathematical geodesy
[CD of SB, p. 45].

- BONSDORFF, Toivo Ilmari (1879–1950).**
 Finland, Helsinki, Finnish Geodetic Institute
 Geodetic astronomy, Solar eclipse measurements
 Ex. Com., I.A.G. (1930–1936)
 [Bull. Geod. 1951, pp. 98–103].
- BOSKOVIC, Stevan, P.**
 Yugoslavia, Belgrade, Institut Géographique Militaire
 Mathematical geodesy, Projections
 Reporter – Projections I.A.G. (1928–).
- BROWNE, Benjamin, C.**
 England, Cambridge, Dept. of Geodesy and Geophysics
 Gravity, Pendulums
 Pres. Sect. IV, Gravimetry (1951–1957).
- BRUNS, (Ernst), Heinrich (1848–1919)**
 Germany, Leipzig, University & Observatory
 Astronomy, Geodesy
 [World Who's Who in Sc. p. 261].
- CAHIERRE, Loic (1901–1984).**
 France, Paris, Institut Géographique National
 Leveling
 Pres. Sect. II, Leveling and Movements of the Crust (1963–1971).
- CHOLESKY, André-Louis (1875–1918)**
 France, Paris, Geographic Service
 Mathematics
 [Bull. Geod. 1922, pp. 159–161].
- CISSE, A. (–1984)**
 Ivory Coast, Abidjan, Institut Géographique
 Pres. Com. XI, Geodesy in Africa (1983–1984)
 [Bull. Geod. 1984, p. 1].
- COX, Jacques (1898–1972)**
 Belgium, Bruxelles, Univ. of Bruxelles
 Classical geodesy
 Pres. Sect. III, Astronomy (1951–1957)
 [Annuaire de l'Académie (Belg.) Vol. CLI, 1985].
- DORE, Paolo (1892–1969)**
 Italy, Bologna, Univ. of Bologna
 Classical geodesy
 Pres. Sect. II, Precise Leveling (1954–1957)
 [Bull. Geod. 1970, pp. 97–98].
- EGGERT, Otto (1874–1944)**
 Germany, Potsdam, Geodetic Institute
 Classical geodesy
 [ZfV 1944, pp. 49–54].
- EÖTVÖS, Roland, Baron von (1848–1919)**
 Hungary, Budapest, University
 Physics, Gravity
 [ZfV, 1919, p. 343].
- GAUTIER, Raoul (1854–1931)**
 Switzerland, Geneva, Observatory – Director
 Geodetic astronomy
 Pres. Reduced Geodetic Association (World War I, 1917–1922)
 Vice-Pres. I.A.G. (1922–1931)
 [Bull. Geod. 1931, pp. 60–75].

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GIGAS, Erwin (1899–1976)

Fed. Rep. Germany, Frankfurt aM., Institut für Angewandte Geodäsie
Control Surveys, Photogrammetry, Cartography
[Verlag Inst. Ang., Geod., Frankfurt aM., 1984].

GROSSMANN, Walter (1907–1980)

Fed. Rep. Germany, Hannover, Technischen Hochschule
Physical geodesy, Gravity, Ellipsoidal geodesy
Sec. Sect. IV, Gravimetry (1960–1967)
[ZfV, 1980, pp. 505–509].

HALMOS, Ferenc (1931–1980)

Hungary, Sopron, Geodetic and Geophysical Research Institute
Mathematical geodesy
Sec. Sect. IV, Theory and Evaluation (1979–1980)
[Bull. Geod. 55–1, 1981].

HAYFORD, John Fillmore (1868–1925)

U.S.A., Washington, D.C., U.S. Coast and Geodetic Survey
Evanston, Ill., Northwestern University
Physical geodesy, Astronomy, Isostasy
Reporter at I.G.A. Assemblies 1906 and 1909 – new ellipsoid
[Bull. Geod. 1925, pp. 126–128].

HEISKANEN, Weikko Aleksanteri (1895–1971)

Finland, Helsinki, Geodetic Institute
Classical geodesy, Gravity, Isostasy
Pres. Sect. V, Geoid (1957–1963)
[Bull. Geod. 1972, p. 3].

HEUVELINK, Hendrik Jan

Netherlands, Delft, Technical Institute
Classical geodesy, Instruments
Exec. Com, I.A.G. (1924–)

HIRSCH, Adolph

Switzerland
Astronomy
Gen. Sec. I.G.A. (1886–1900).

HONKASALO, Tauno Brunolf (1912–1975)

Finland, Helsinki, Geodetic Institute
Gravity
Pres. Spec. Study Group No. 21, Special Techniques of Gravity Measurements (1971–1975)
Elected Pres. Sect. III, Gravimetry (1975).
[Bull. Geod. 1976, pp. xi–xii].

HOTINE, Martin (1898–1968)

England, Tolworth, Overseas Surveys
Mathematical geodesy
Reporter – Projections (1948)
Pres. Spec. Study Group, Adjustment of Triangulation Systems (1957–1960)
[Bull. Geod. 1969, pp. 8–12].

JACQUINET, P. (1895–1966)

France, Paris, Institut Géographique National
Control surveys
Pres. Sect. I, Triangulation (1948–1954).

JOLLY, H. L. P.

England,
Control surveys
Reporter – Astronomy (1924–)

- JONES, Louis (1914–1975)
 Belgium, Bruxelles, Watermael Boitsfort
 Leveling, Crustal movement
 Pres. Com. for European Leveling Network (1971–1975)
 [Bull. Geod. 1976, pp. ii–x].
- JORDAN, Wilhelm (1842–1899)
 Germany, Hannover, Technische Hochschule
 Classical geodesy
 [ZfV, 1922, pp. 577–585].
- KING, W. F. (1884–1916)
 Canada, Ottawa, Geodetic Survey
 Dominion Geodesist
 [Bull. Geod. 1922, pp. 131–136].
- KNEISSL, Max (1907–1973)
 Fed. Rep. Germany, Munich, Geodetic Institute
 Classical geodesy
 Pres. Com, No. I, Readjustment of European Triangulation (1954–1973)
 [Bull. Geod. 1974, pp. 5–8].
- KOBOLD, Fritz (1905–1985)
 Switzerland, Zurich, Federal Institute of Technology
 Classical geodesy
 Pres. Com, No. I, Readjustment of European Triangulation (1973–1979)
 [Bull. Geod. 59–4, 1985].
- KRASOVSKII, F. N. (1878–1947)
 U.S.S.R., Moscow, Central Scientific Research Institute of Geodesy
 Classical geodesy
 [Bull. Geod. 1946, pp. 5–6].
- KRÜGER, Johannes, Heinrich, Louis (1857–1923)
 Germany,
 Geodesy, Projections
 [ZfV, 1923, pp. 281–284].
- KRZEMINSKI, Wojciech (1926–1981)
 Poland, Warsaw
 Classical geodesy
 Adjoint Sec. I.A.G. (1975–1981)
 [Bull. Geod. 55–2, 1981].
- LALLEMAND, Charles (1857–1938)
 France, Paris
 Leveling
 Pres. I.U.G.G. (1922–1933)
 [Bull. Geod. 1938, pp. 76–84].
- LEDERSTEGER, Karl (1900–1972)
 Austria, Vienna, Technische Hochschule
 Classical geodesy
 Sec. Sect. V, Geoidal Studies (1957–1963)
 [Bull. Geod. 1973, p. 114].
- LEJAY, Pierre (1898–1958)
 France, Paris
 Physical geodesy, Gravity
 Pres. Sect. IV, Gravimetry (1948–1954)
 [Bull. Geod. 1959, pp. 2–6].

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- LENOX-CONYNGHAM, Sir Gerard (1866–1956)**
England, Cambridge, Trinity College
India, Survey of India (31 years)
Classical geodesy, Pendulums
Member Exec. Com. 1922–
2nd Vice-Pres. I.A.G. (1933–1936)
[Bull. Geod. 1957, pp. 78–81].
- MATHER, Ronald S. (1933–1978)**
Australia, Kensington, Univ. of New South Wales
Physical geodesy
Pres. Sect. V, Physical Interpretation (1975–1978)
[Bull. Geod. 52–4, 1978].
- MEISSL, Peter (1934–1982)**
Austria, Graz, Institut für Geodäsie, Technische Hochschule
Mathematical geodesy
Pres. Study Group 4.38, Computer techniques in geodesy (1975–1979)
[Bull. Geod. 56–3, 1982].
- MESCHERIKOV, Ju (1922–1970)**
U.S.S.R., Moscow, Institute of Geophysics
Physical geodesy, Crustal movement
Pres. Com, No. VII, Recent Movements of the Earth's Crust (1963–1970)
- NIETHHAMMER, Theodore (1876–1947)**
Switzerland, Binningen (Bale), Dir. Astro. Met. Anstalt
Classical geodesy
[Bull. Geod. 1948, pp. 189–190].
- NØRLUND, N. E. (1885–)**
Denmark, Copenhagen, Geodetic Institute
Classical geodesy, Mathematics
Pres. Sect. III, Astronomy (1948–1954)
Honorary Member Exec. Com, (1957–1967)
- PEIRCE, Charles, Sanders (1839–1914)**
U.S.A., Washington, D.C., U.S. Coast and Geodetic Survey
Mathematics, Pendulums, Philosophy
Reporter to I.G.A.
[EnBr].
- RICE, Donald, A. (1909–1978)**
U.S.A., Washington, D.C., U.S. Coast and Geodetic Survey
Classical geodesy, Gravity
Pres. Sect. IV, Measurement of Gravity (1960–1967)
[Bull. Geod. 52–4, 1978].
- ROSS, J. Earl R. (1892–)**
Canada, Ottawa, Geodetic Survey of Canada
Classical geodesy, Shoran
Pres. Study Group, Calculation of shoran Networks (1957–1960)
- ROUSSILE, H. (1879–1945)**
France, Paris
Hydrography, Cartography, Classical Geodesy, Photogrammetry
Reporter – Projections (1922–1933), Pres. Com, Finances (1927–1933).
- RUNE, G. A. (1882–1969)**
Sweden, Stockholm, Rikets Allmänna Kartverk
Control surveys
Pres. Sect. II, Leveling (1947–1951)
[Bull. Geod. 1969, p. 217].

- van de SANDE BAKHUYZEN, Hendriekus Gerardus (1838–1923)
 Netherlands, Leyde, Observatory
 Astronomy
 Sec. Gen. I.G.A. (1900–1922)
 [Bull. Geod. 1924, pp. 107–116].
- SCHERMERHORN, Willem (1894–1977)
 Netherlands, Delft, Geodetic Institute
 International School of Photogrammetry
 Classical geodesy, Photogrammetry
 [ZfV, 1977, p. 280].
- SELIGMANN, Henri, D' (1868–1955)
 Belgium, Bruxelles, Military Geographic Institute
 Control surveys
 Member Exec. Com. (1924–)
 [Ciel et Terre (Belg.), Vol. 71, 1955].
- SOLER, Emanuele (1867–1940)
 Italy, Parma, University
 Classical geodesy, Gravity
 Reporter – Gravity (1924–)
 Vice-Pres. I.A.G. (1936–1939)
 [Bull. Geod. 1938, pp. 832–834].
- STOKES, Sir George, Gabriel (1819–1903)
 England, Cambridge, University
 Mathematics, Physics
 [EnBr].
- TIENSTRA, Jacob, M. (1895–1951)
 Netherlands, Delft, Geodetic Institute, Tech. Univ.
 Mathematical geodesy
 Reporter – Triangulation, Oslo Assembly (unable to attend)
 [Bull. Geod. 1951, pp. 377–380].
- VÄISÄLÄ, Yrjö (1891–1971)
 Finland, Helsinki, Geodetic Institute
 Turku, University
 Astronomy, Physics
 [Bull. Geod. 1972, p. 4].
- VIGNAL, Jean (1897–1969)
 France, Paris, Institut Géographique National
 Leveling
 Pres. Sect. II, Leveling (1948–1951)
 [Bull. Geod. 1969, p. 210].
- ZHONGOLOVICH, Ivan, Danilovich (1892–1981)
 U.S.S.R., Leningrad, Astronomical Institute
 Physical geodesy
 Sec. Sect. V, Geoidal Studies (1957–1960)
 [Bull. Geod. 56–3, 1982].

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3. Geodesists associated with International Latitude Service

ALBRECHT, Th.
Germany, Potsdam

WANACH, B.
Germany, Potsdam

MAHNKOPF, H.
Germany, Potsdam

KIMURA, H.
Japan

CARNERA, L.
Italy

CECCHINI, G.
Italy, Turin

YUMI, S.
Japan

YOKOYAMA, I.
Japan

Geodesists associated with Bureau International de l'Heure

STOYKO, N.
France, Paris

GUINOT, Bernard
France, Paris

