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## Aeronautics Companies in the Archive of the Instituto Nacional de Industria

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### Elena Laruelo Rueda

## **OUTLINE**

INI's companies within the aeronautics industry

Sociedad Elizalde S.A. / Empresa Nacional de Motores de Aviación S.A. (ENMASA)

Construcciones Aeronáuticas (CASA)

Sociedad Jorge Loring / Aeronáutica Industrial S.A. (AISA)

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### **TEXT**

The activities' program established between 1941 and 1942 included the aeronautic industry within the category of "Transformation industries with a military use" and the activity was defined as "aeronautics industries, including engines". Spain's political and economic isolation justified that aeronautics industries were regarded as a strategic branch for the national defense. In 1939 an Air Ministry had been established with the aim of reorganizing and modernizing the aeronautic industry and promoting the domestic production. The financing problems which arose with the management of the aeronautics programs envisaged by the Ministry provoked INI's intervention into this industry.

## INI's companies within the aeronautics industry

- In the first quarter of the 20<sup>th</sup> century, before INI's establishment, Spain saw the incorporation of a number of private capital companies for the manufacture of automobiles which ended up making also aircraft.
- Since their incorporation by private investors until they were intervened by the Spanish State and attached to INI, mention must be made to the following companies:
  - Hispano Suiza S.A. / Hispano Aviación S.A. (HASA)
  - The Hispano Suiza Fábrica de Automóviles company, whose registered office
    was in Barcelona, was incorporated in 1904 for producing car and trucks engines. In 1917 an engines factory was opened in Guadalajara, for which was
    setup the affiliated company "La Hispano, Fábrica de Automóviles y Material
    de Guerra", which included an aeronautic department.
- As a result of the change of the political regime in 1931 the import of certain raw materials became difficult, thus provoking a reduction in the company's production and sales; this led to the purchase of the automobile department and of the industrial facilities in Guadalajara by the company Fiat Hispania, while Hispano Suiza kept the aeronautic activity. With the start of the civil war in 1936, the activity of the Guadalajara's factory stopped, with the restart of the aeronautic activity in 1937 in Seville's factory. In 1943 it achieved the Air Ministry's permission for manufacturing combat aircrafts, for which it set up the Hispano Aviación (HASA) company. Two thirds of its capital were supplied by Hispano Suiza, while the remaining third came from the Air Ministry, which transferred it to INI in 1944. Until 1960 it carried out the plans envisaged in the contracts in force with the Air Ministry, manufacturing the aircraft series agreed, including projects, prototypes and repairs. The change in the economic situation affected the aeronautic orders, leading to the diversification of its activities, with the manufacture of a wide range of machinery. In 1972 it was taken over by CASA through a capital increase.



Fig. 1. HS-42-D1 aircraft flying over Sevilla (Spain), 1955.

(SEPI's Historical Archive. Exp. 3378. HASA)

## Sociedad Elizalde S.A. / Empresa Nacional de Motores de Aviación S.A. (ENMASA)

- Elizalde Company was incorporated in 1908 for making automobiles, and in 1925 its activity was restricted to aeronautics engines. Its research and experimental activities exceeded its financial means and it was taken over by the State through INI.
- INI's participation in Elizalde S.A, began in January 1951 through a capital increase which resulted in its being the majority owner, and replacing the original name by Empresa Nacional de Motores de Aviación. The engines manufactured in the 1950s ("Beta", "Sirio", "Tigre", "Flecha" and "Alción") were used in different aircrafts from CASA, HASA and AISA in which INI held a share, but without reaching a production figure which made them profitable. The apparition of jet engines meant the end of the piston engines, and although an attempt was made to reach an agreement with the French company TURBOMECA for installing the "Marboré II" engine into the "Saeta" aircraft, the problems for importing the parts which could not be manufactured in Spain put an end to this attempt. The reduction of

the orders from the Air Ministry limited its aeronautic activity to the production of spare parts and to the review of the engines; it began to make steel forging and light composites, the manufacture of automobile and light industrial vehicles engines, machinery and tools. In 1973 it was taken over by CASA.



Fig. 2. "Marboré" jet in a soundproof workbench, 1955.

(SEPI's Historical Archive. Exp. 2787. ENMASA)

## Construcciones Aeronáuticas (CASA)

- Incorporated in 1923 with the main goal of covering the requirements of the Air Force, it inaugurated in 1924 the Getafe's factory near Madrid with mechanical, assembly and light composite forging workshops; in 1927 it started its activities in the Cádiz factory for the manufacture of metallic hydroplanes, and in the Sevilla's factory since 1930, in which the engines for bombers were made. CASA's production was halted in 1936, and it was restarted in 1940.
- The Air Ministry promoted the publication of a decree by the President's Office on June 22<sup>nd</sup>, 1943 which allowed CASA a capital increase, through which INI purchased a third of its social capital. Since INI's entry, the company's goals were the manufacture, review and repair of domestic and foreign aircrafts and helicopters. The lack of aeronautics programs meant a 50% increase of the ancillary activities which involved aircraft repair and review, the manufacture of spare

- parts for automobiles and motorbikes, train carriages and of aluminum composite structures.
- The quality of its activities brought it to the attention of the US Northop Corporation which in 1961 took a 24% shareholding in CASA capital. Among a number of international collaborations an agreement was signed with the French Sud-Aeronautic for submitting joint offers to the European Space Research Organization (ESRO), which meant the start of its activities within the airspace industry.
- In 1971 INI became the majority shareholder with the aim of coordinating and integrating the means of all INI's aeronautics companies and, accepting the French proposal, being able to increase the Spanish participation in the production of the Mercure aircraft and beginning the negotiations with France and Germany for stipulating the Spanish terms and conditions for taking part in the Airbus project.
- In 2000 it was merged into the EADS Group which in 2013 was renamed as the Airbus Group.

Fig. 3. A number of "Alcotán" type aircrafts in an early assembly stage, 1955, Madrid (Getafe).



(SEPI's Historical Archive. Exp. 3250. CASA)

# Sociedad Jorge Loring / Aeronáutica Industrial S.A. (AISA)

It began its activity in Madrid in 1923 for manufacturing military aircrafts, gliders and training aircrafts. Loring collaborated in the construction of two different prototypes of the *Juan de la Cierva*'s autogiro, who in 1925 incorporated in the United Kingdom the "Autogiro Company". In 1934 became the Sociedad Aeronáutica Industrial S.A. (AISA), which restarted its activity in 1939, attached to the Air Ministry, which set its guidelines and appointed its managers. In 1954 the President's Office ordered that INI gets a third of its capital, and its control. It manufactured one-engine training aircrafts, and it took part in the review, repair and rebuilding of military engines and helicopters for the US military. In 1957 the lack of orders from the Air Ministry forced it to diversify its activities to car manufacturing, limiting its aeronautic activity to the review and repair of aircrafts and helicopters. It was sold in 1971.

Fig. 4. Aerotécnica AC-12 helicopter built in collaboration with ENHASA, 1959.



(SEPI's Historical Archive. Exp. 3569. AISA)

## IBERAVIA / Empresa Nacional de Hélices para Aeronaves (ENHASA)

IBERAVIA, a Spanish company incorporated in Madrid in 1946 for 13 manufacturing aircrafts, submitted to the Air Ministry a project for the manufacture of propellers and landing gears for aircrafts. The Ministry gave INI the task of continuing with this project, and started a Managing Committee for Propellers to that end. In 1950 after a process for liquidating the expenses incurred by IBERAVIA and the above-mentioned committee, the ENHASA company was incorporated in that year by a Law Decree, with the goal of manufacturing and repairing propellers and landing gear, both for aircraft and helicopters belonging to the military, flying clubs and commercial companies. The apparition of the jet engines meant the reduction of its main activity, beginning the manufacture of machinery, tools, rolling stock, telecommunication, electronic and optical equipment, and precision mechanics. From 1965 onwards it was limited to aeronautic-related works. It was liquidated in 1971.

Fig. 5. Partial view of the workshop for the assembly and repair of metallic propellers, 1953.



(SEPI's Historical Archive. Exp. 1398. ENHASA)

# **Talleres Aeronáuticos de Barajas** (TABSA)

- INI's company for air transport, Aviación y Comercio, S.A. (AVIACO) 14 and the British company The Bristol Aeroplane Co. Ltd., established in 1953 this company in order to be able to carry out in Spain the review of the aeronautic engines "Bristol Hercules" class used by AVIACO. The cost reduction which resulted from not making the review in other countries led to other state-owned company, IBERIA Líneas Aéreas de España, as well as a number of fumigation and aerial photography companies, the Air Ministry and the Ministry of the Navy to give it the task of reviewing their engines. The increase in its activity led the company to build in 1958 another factory in Madrid. The disappearance of the piston engines and the unification of IBERIA's and AVIACO's fleets provoked that 98% of TABSA's activity were with these companies, specifically for jet engines. IBERIA and AVIACO held a 56% share in the capital, and as they were INI-owned companies, the Institute had an indirect participation. The ENMASA Company had a 15.95% shareholding, as a result of INI's program of concentrating the aeronautic and propellers engines review industries.
- TABSA was dissolved in 1974 by a resolution of INI's Board of Directors.

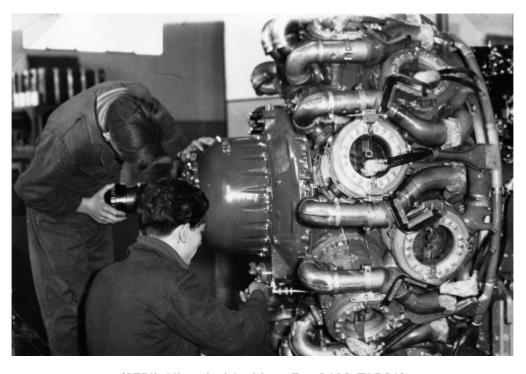


Fig. 6. A Bristol-Hercules engine under revision, 1957.

(SEPI's Historical Archives. Exp.3623. TABSA)

## **SEPI's Historical Archive**

In 1992 the state-owned company TENEO was incorporated within 16 INI, grouping together those companies which were required to carry out their activity within a free market environment, while keeping those companies which were under reorganization plans within INI. In 1995 INI was liquidated through Royal Law Decree 5/1995 ("Law 5/1996 of January 6<sup>th</sup>, for the setup of certain public law entities") together with the Instituto Nacional de Hidrocarburos 1 and a new institutional order was established, with the incorporation of the Agencia Industrial del Estado (AIE), which was in charge of managing the companies under reorganization programs, while state-owned shareholdings in the remaining business concerns were transferred to the Sociedad Estatal de Participaciones Industriales, (SEPI), a public law entity, which with the disappearance in 1997 of the AIE kept its role as the strategic tool for carrying out the policy designed by the Spanish Government within the state-owned branch.

In 2001 were transferred to SEPI controlling stakes in 11 companies belonging to the Dirección General de Patrimonio and to the Sociedad Estatal de Participaciones Patrimoniales, (SEPPA).

Fig. 7. Diagram with the reorganization of the Spanish state-owned sector.



(Elena Laruelo Rueda)

The result of the different reorganizations of the state-owned industrial sector at the documentation level has been that SEPI is currently the keeper of the archives from INI, AIE, TENEO and SEPPA.

## INI's Historical archive

- The functions carried out by INI<sup>2</sup> as promoter and manager of corporate activities in the strategic industries, as an administrator of public funds for financing and controlling its company's activities, provide an interesting source of corporate and industrial information for carrying out research activities, both of the companies and of the industrial branches in which investments were made.
- The documentary collections of the Historical Archive which can currently be consulted are those dated since INI's creation up to 1989:
  - Departamento de Registro General (entry and exit of the correspondence and proceedings between INI's departments);
  - Dirección de Comunicación (photographs and films);
  - Vicesecretaría del Consejo de Administración (deeds and files of INI's Board of Directors);
  - Altos Cargos (management files of INI's chairmen since 1941 up to 1989);
  - Direcciones INI (management files).

## Organization

Registro General (General Registry) constitutes the largest documentary collection within INI's Archive, and notwithstanding the existence of such important archives as those generated by the Secretary of the Board, the Registry kept the documents which better represent INI's activities. For their classification use was made of system for controlling the documentation flow very little used in other institutions, since instead of organizing them by files, the documents were classified by issues according to a system

of decimal codes with the goal that each document was filed in all the classifications which reflected its content, thus making easier its location; the disadvantage of such a system is an increase in the number of copies. Its organization begins with the following classifications:

- 0 General matters
- 1 INI's accounting and finance
- 2 Industrial Department
- 3 Companies
- 4 INI's general organic
- Each classification was subdivided, using up to three or four numbers. In the case of the companies, once they became attached to INI, an individual code was given to each which was subdivided in accordance with the following matters:

Fig. 8. Archive's companies secondary matters

0 Miscellaneous	5 Law	
1 Personnel	6 Affiliated Companies	
2 Writings, Bye-Laws, Regulations	7 Deeds	
3 Economics and Finance	8 Confidential	
4 Studies, Reports and Technical Projects	9 Orders	

(Elena Laruelo Rueda)

The documents belonging to the files Altos Cargos (Senior Management), Vicesecretaría del Consejo de Administración (Deputy Secretary of the Board of Directors) and the classification of the General Re-

gistry under the heading Expedientes originales are organized by companies and matters.

## Quantification

The number of files and photographs in INI's archive related to the aeronautic industry is as follows:

Fig. 9. Aeronautics industries' number of references.

Companies	Photographs	Files
HASA	86	178
ENMASA	113	237
CASA	106	391
AISA	85	133
ENHASA	72	181
TABSA	7	3
Industrial section - Aeronautic industry	-	50

(Elena Laruelo Rueda)

## Website of INI's archive

The system for organizing INI's archive included in each file a typed index which described and dated each document. The automatization of the files' management and the digitalization of these descriptive tools made possible the creation of a website which might be a useful search tool for the archive's users. The website also includes an access to the catalogues of INI's library and newspaper library. As progress is made in the as yet not catalogued document collections it is envisaged top include in the near future INI's photographic collection within the archive's website: <a href="http://archivo.sepi.es/">http://archivo.sepi.es/</a>.

## Library and newspaper library

INI's library and newspaper library are tools for supporting the search for information about the industrial branches in which INI had an interest. Since its creation, INI was subscribed to a number of US, British, Italian, French, Swiss, or German journals focused on indus-

- trial and economic issues with the goal of updating its knowledge and training its employees.
- Since 1947, INI published a number of institutional journals which sought to make known the Institute's activities, as well as those of its companies, with translations, book reviews and international articles. The most interesting journal published by INI was titled Revista de información del Instituto Nacional de Industria, whose precedent was the Boletín semanal de información (weekly information bulletin). The first issue was published in July 1947, the publication continued until 1970.
- In order to carry out their activities they prepared a large number of reports by branches which make up an interesting "grey literature".
- Due to the help they provide to researchers, mention must be made to the collection of INI's Annual Reports which were used for describing the Institute's yearly activities as well as its Balance Sheets; these also include attached files with the Institute's general information and the annual report and balance sheets of the companies, either incorporated by INI or those in which it had a shareholding stake.

### **BIBLIOGRAPHY**

- J. A. Barragán, "Historia del Sector Aeronáutico (1)", SEPI. Estrategias, nº 16, "Sociedad Estatal de Participaciones Industriales", Madrid, may-june 2005, p. 27-31.
- J. A. Barragán, "Historia del Sector Aeronáutico (2)", SEPI. Estrategias, nº 17, "Sociedad Estatal de Participaciones Industriales", Madrid, september-october 2005, p. 27-31.
- J. A. Barragán, "Historia del Sector Aeronáutico (3)", SEPI. Estrategias, nº 18, "Sociedad Estatal de Participaciones Industriales", Madrid, 2006, p. 27-31.
- J. A. Barragán, "Historia del Sector Aeronáutico (y 4)", SEPI. Estrategias,

- nº 19, "Sociedad Estatal de Participaciones Industriales", Madrid, 2006, p. 30-33.
- A. González-Betés, J. Rodríguez-Carmona, En el origen de la industria aeronáutica española (1954-2004), Asociación Española de Constructores de Material Espacial (ATECMA), Madrid, 2006, 280 páginas.

Índice de actividades del INI y entidades que las realizan, Centro de Estudios Económicos y Sociales del Instituto Nacional de Industria, Madrid, 1963, 309 páginas.

A. Iniesta Cañabate, "La fabricación de motores de aviación a reacción y su

contribución al desarrollo de nuevas técnicas", Revista de Información del INI, nº 11, Instituto Nacional de Industria, Madrid, 1963, p. 52-59.

Instituto Nacional de Industria, Notas en relación con la creación y desenvolvimiento del Instituto Nacional de Industria: Escritas al constituirse y reunirse, por primera vez el Consejo de Administración de este organismo, INI, Madrid, 1941.

E. Laruelo Rueda, El Archivo Histórico del INI: fuentes para el estudio de la empresa pública industrial, Asociación Española de Historia Económica, 2005, 27 páginas. <a href="http://www.usc.es/estaticos/congresos/histec05/b21\_laruelo.pdf">http://www.usc.es/estaticos/congresos/histec05/b21\_laruelo.pdf</a>

R. Mazarrasa Quijano, "La situación del INI en la industria Aeronáutica", Revista de Información del INI, nº 44, Instituto Nacional de Industria, Madrid, 1968, p. 38-58.

Á. Patón Cervantes, La Fabricación de los motores de aviación en España: Cronología desde Elizalde hasta CASA, Colegio y Asociación de Ingenieros y Técnicos Aeronáuticos, 2008,141 páginas.

E. San Román, Ejército e Industria: El nacimiento del INI, Crítica / Historia del Mundo Moderno, Barcelona, 1999, 335 páginas.

## **NOTES**

- 1 Instituto Nacional de Hidrocarburos (INH) was created in 1981 for managing the state-owned companies active in the hydrocarbons industry and which up to then belonged to INI.
- 2 c/ Velázquez, 134. 28006 Madrid (Spain) tel. 34+91 3961000; <u>archivo@sepi.es</u>.

### **ABSTRACTS**

#### **English**

The Law for the establishment of the Instituto Nacional de Industria (INI) on September  $25^{\rm th}$ 

, 1941 was an initiative taken by the Spanish Government in order to set up its industrialization program. INI had enough financial and legal capacity for managing and controlling the companies which were incorporated or taken over, always under the Government's overview.

In INI's Establishment Law the industrial activities were grouped into seven large categories, which in turn were divided into thirty-three subcategories, together with the investment plans, the aim was to set up an industrial plan, which gave priority to the industries for the country's defense or to those which played a role in the development of the economic autarchy.

#### Français

L'Instituto Nacional de Industria (INI) a été créé pour mettre en œuvre le plan industriel conçu par le gouvernement espagnol après la guerre civile, dans le but de promouvoir le développement industriel du pays, par le biais d'une prise de participation dans les entreprises appartenant aux branches industrielles considérées comme stratégiques. Parmi celles-ci se trouvait l'industrie aéronautique. Pendant un certain temps, ce fut le premier groupe d'entreprises espagnol, et l'un des plus importants de la Communauté européenne. Au cours de son existence, l'INI détenait une participation directe et majoritaire dans environ 180 entreprises, avec un effectif total qui dépassait les 250 000 salariés.

Cet article présente les archives de l'INI et décrit brièvement l'histoire et les activités menées par les sociétés de l'industrie aéronautique, dans lesquelles cette institution détenait une participation.

### INDEX

#### Mots-clés

industrie aéronautique, entreprises d'état, fonds d'archives, XXe siècle, Instituto Nacional de Industria (INI), Europe, Espagne

#### **Keywords**

aeronautics, state-owned enterprises, 20th century, Instituto Nacional de Industria (INI), Europe, Spain

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