

THE FRENCH INDUSTRY IN BRIEF

The notes below are condensed from a directory published by the Union Syndicale des Industries Aeronautiques et Spatiales, France's equivalent of the SBAC

AIRFRAMES AND MISSILES

Alpavia, Aéroport de Gap-Tallard, Hautes Alpes. Manufacture of the Fournier RF-3 Avion Planeur.

Breguet (Société des Ateliers d'Aviation Louis Breguet), 24 rue Georges Bizet, Paris 16e. For details see articles.

Centre Est Aéronautique, Aerodrome Darois-Val Suzon, Dijon. Manufacture of the Jodel 105 h.p. three-seat Sicile Record; developing the Gaucho.

GAM Dassault (Général Aéronautique Marcel Dassault), 78 Quai Carnot, Saint Cloud, Seine-et-Oise. For details see articles.

Hurel-Dubois (Société de Construction des Avions Hurel Dubois), Route de Verrières, Meudon, Seine-et-Oise. Major sub-contract work for manufacturers and others, including Sud-Aviation (Caravelle furnishings), Dassault (Mirage III rear fuselage sections and IIR nose sections, etc, and gun mountings for III on direct Government order), Nord (drawings for Super Broussard wing series production) and Air France (Boeing 707 seats).

Latécoère (Société Industrielle Latécoère), 78 avenue Marceau, Paris 16e. Malafon anti-submarine missile for French Navy, postal rocket for PTT, spaceflight centrifuges, rear fuselage sections for Sud Caravelle.

Matra (Engins Matra), 49 rue de Lisboune, Paris 8e. Series production of air-to-air R.511 and R.530 missiles and other missiles; rocket launchers.

Morane-Saulnier (Société d'Exploitation des Etablissements Morane-Saulnier), 46 avenue Kléber, Paris 16e. For details see articles.

Nord-Aviation (Société Nationale de Constructions Aéronautiques), 12bis avenue Bosquet, Paris 7e. For details see articles.

Potez (Etablissements Henry Potez), 46 avenue Kléber, Paris 16e. For details see articles.

Reims-Aviation, Hangar S.11, Aerodrome du Bourget, Seine. Licence production of the Cessna 172. As successors to Max Holste, and in association with Nord, Reims-Aviation also participates in manufacture of the Super-Broussard maintenance. Developing the Scolair.

SAN (Société Aéronautique Normande), Aerodrome Saint-Martin, Bernay, Eure. Manufacture of Jodel variants Mascaret, Excellence and Mousquetaire III: developing the D.160.

Scintex-Aviation (Société Anonyme Scintex), 65 rue de l'Industrie, Courbevoie, Seine. Production of the Scintex Super Emerald (five per month) and Rubis (two per month) light aircraft.

SFERMA (Société Française d'Entretien et de Réparation de Matériel Aéronautique), 3 Quai Gallieni, Suresnes, Seine. Production of the SFERMA-Beech 60 Marquis, overhaul of airframes, turbines (small and medium power), instruments and radio; manufacture of handling equipment.

SIPA (Société Nouvelle Industrielle pour l'Aéronautique), 40 rue J.-J. Rousseau, Suresnes, Seine. Production of the 4/5-seat Astazou-powered Sipa Antelope; work on projected two-Astazou feederliner; rocket design and construction; manufacture of airliner seating and galley units; general sub-contract work; overhaul of military light aircraft.

Sud-Aviation (Société Nationale de Constructions Aéronautiques), 37 bvd de Montmorency, Paris 16e. For details see articles.

Wassmer-Aviation, Route de Parentignat, Issoire, Puy-de-Dôme. Series production of the Jodel D.112, Jodel-Wassmer D.120, Wassmer Super IV and WA.22 Super Javelot and WA.30 Bijave sailplanes.

ENGINES

CGTM (Compagnie Générale des Turbo-Machines), 26-32 rue de Villiers, Levallois-Perret. Originally formed in 1956 by Hispano-Suiza and Turbomeca as a joint research facility, this company operates a fleet of aircraft (including a Languedoc equipped as a test-bed for ice investigation) equipped for gas turbine development and research.

Hispano-Suiza, rue du Capitaine Guynemer, Bois-Colombes, Seine. Licence production of the Rolls-Royce Tyne; large scale production of the SEPR 841 rocket motor for the Mirage III; overhaul of jet engines; licence production of Martin-Baker ejection seats; manufacture of landing gear for the Alizé, Atlantic, and Caravelle.

Nord-Aviation, 12 rue Béranger, Chatillon-sous-Bagneux, Seine. For details see articles.

Potez-Avco, 206 rue Henri-Barbusse, Argenteuil, Seine-et-Oise. This comparatively new company produces the Potez 4E 20-4E 30 and 6E engines of 105 to 180 h.p. and, under licence from Avco Corp, a range of Lycoming piston engines and gas turbines.

SEPR (Société d'Etude de la Propulsion par Réaction), 1 voie des Sables, Villejuif, Seine. Liquid- and solid-fuel propulsion units for aircraft and missiles. Recent work has included pre-production SEPR rocket motors for the Mirage III, preparatory to large-scale production by Hispano-Suiza. Much experimental and development rocket-motor work is being done, and technical and other agreements exist with several firms in Europe and the USA.

SNECMA (Société Nationale d'Etude et de Construction de Moteurs d'Aviation), 150 bvd Haussmann, Paris 8e. For details see articles.

TURBOMECA (Société Turbomeca), Bordes, Basses-Pyrénées. For details see articles.

LANDING GEAR AND PROPELLERS

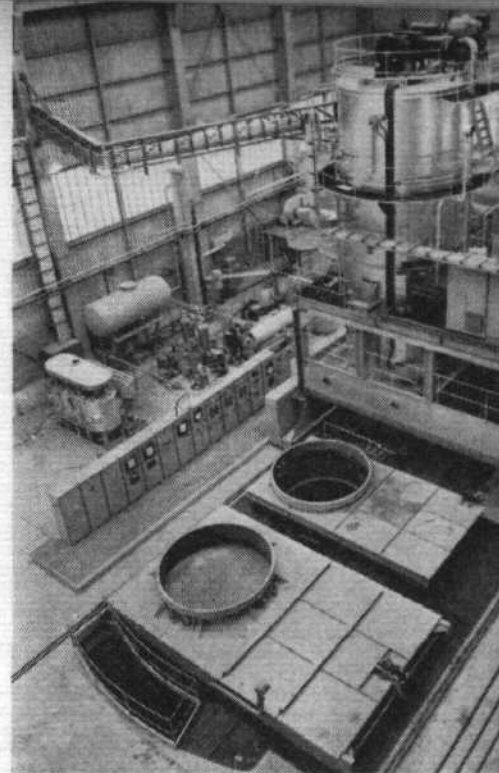
ERAM, 153 rue de Noisy-le-Sec, Les Lilas, Seine. Production-line manufacture of undercarriages, wheels, brakes and hydraulic equipment for several constructors, including Nord, Morane-Saulnier and Scintex.

Hispano-Suiza, rue du Capitaine Guynemer, Bois-Colombes, Seine. In addition to engine manufacture (q.v.), this company has a landing-gear division.

Messier, 58 rue Fénelon, Montrouge, Seine. The products of this old-established (1927) firm of landing-gear specialists are to be found on a dozen current French military aircraft types and several civil types also. Between 1945 and 1963, Messier claim, they equipped 78 prototypes, 24 of which went into production.

Breguet (Société des Ateliers Louis Breguet), 24 rue Georges Bizet, Paris 16e. For details see articles.

Ratier-Figeac, 16 Rue de la Paix, Paris 2e. Established as long ago as 1912, Ratier today manufacture propellers in two broad categories, the electrically controllable-pitch type as used on various Astazou-powered aircraft and, secondly, Hamilton and de Havilland (now Hawker Siddeley Dynamics in this context) propellers under licence.



SNECMA have great experience in the field of large rockets, and are now collaborating with Nord-Aviation on case fabrication. Here, in the Gennevilliers plant, is a case heat-treatment installation

COMPONENTS, EQUIPMENT AND SERVICES

ABG, 3 impasse Thoréon, Paris. Ignition equipment, wire-type fire detector (Edison), temperature regulators, high-temperature valves, starter carts, sheet metal work and pipes.

Accumulateurs Fixes et de Traction, 156 ave de Metz, Romainville, Seine. Cadmium-nickel and iron-nickel airborne Voltabloc batteries.

ADR (Applications du Roulement), 2 rue Bréguet, Paris. Bearings and joints for flight controls and engines, gyroscopes, radar units, generators. Precision bearings.

Aerazur, 58 bvd. Gallieni, Issy-les-Moulineaux, Seine. Parachutes. Pneumatic survival and rescue equipment, anti-g suits and valves, high-altitude clothing. Field barriers, ground handling equipment, special vehicles.

Air-Equipement, 18 rue Basly, Asnières, Seine. Flight and navigation instruments, accessory gearboxes, winches. Servo-controls, hydraulic pumps and lines. UHF and VHF transmitters and receivers. Generators and starters.

Air-LB, 240 rue Gabriel-Péri, Colombes, Seine. Circuit breakers, pipe and wiring conduits, wiring harness.

Air-Liquide, 75 quai d'Orsay, Paris 7e. Gases, liquid gases, hydrogen peroxide, plastics.

Air-Precision, 2 rue Alexis-Maneyrol, Chaville, Seine-et-Oise. Gyroscopic, electric and pneumatic control equipment. Repair and maintenance of flight instruments. Test benches.

Aivaz, 11 rue Jules-Ferry, Suresnes, Seine. Tanks, radiators, fuel pumps, sheet metal work.

Alkan, 50 ave Claude-Vellefaux, Paris. Bomb racks, torpedo launchers, firing equipment, jettison equipment for heavy loads, ground handling equipment, winches, autopilots, gyro-horizons.

Alsthom, 169 bvd de Valmy, Colombes, Seine. Cockpit canopies, windows, etc. Laminated parts from synthetic resin base.

Altulor, 36 ave Kléber, Paris. Plastics.

AMA, 1 bvd Bineau, Levallois-Perret, Seine. Engine controls, radiators, heat exchangers, filters. Sheet metal work.

AMP France, 29 Chaussée Jules César, Pontoise, Seine-et-Oise. Solderless electrical connections.

Amortisseur Apex, 4 rue Duhesme, Paris. Shock and vibration mounts.

Analac (Société), 101 bvd Murat, Paris 16e. High-frequency analogue computers. Simulators. Automatic reading heads and tracing stylus units.

Appareillage Aéronautique, 16 rue Nansouty, Paris. Flight and navigation instruments. Shock-mounted instrument panels.