

COMMERCIAL AVIATION

Re-alliance proposed for airbus

The uncertain future of the European airbus, which took one recent turn with Britain's decision to trim the passenger load from 300 to 250 (SN: 2/8, p. 144), has now become even more confused, with a Franco-German proposal that could freeze Britain out of the tri-nation consortium altogether.

West German and French representatives reportedly are working on the possibility of re-assembling the multinational industry consortium that would build the plane. Italy and Holland would both join the new merger, possibly along with Belgium. Britain, however, was not invited to the initial discussions on Jan. 17.

Saab of Sweden has extended feelers of its own to the partners about becoming a member. Under the original plan Britain would provide 37.5 percent of the funding. Germany is expected to take the lead in filling the gap, to build up its civil aircraft industry.

AIR TRANSPORT

STOLport for New York

New York City has developed plans to build a short take-off and landing airport along the Hudson River within three years.

The STOLport, designed to handle aircraft using runways only about 1,000 feet long, would be built atop a 10-story building, 300 feet wide and seven blocks long. The facility could handle some 14 million passengers and two million tons of cargo annually, the New York City Planning Commission estimates.

At present, the site planned for the STOLport is that of New York's piers 66 through 73, running along the river between 26th and 33rd Streets. The only STOL facility now serving the city is a 1,095-foot strip at LaGuardia Airport (SN: 9/7, p. 229), the first operational STOL-only strip in the country.

The rooftop airport is part of a master plan that also endorses previous proposals for a fourth metropolitan area jetport, in Calverton, Long Island. In addition, the plan recommends study of another jetport, to be built on an artificial island in the Atlantic off Rockaway Beach, as a replacement for Kennedy International Airport, which would be converted to residential and industrial use.

UPPER ATMOSPHERE

Canadian ionospheric probe

Research on the nature and behavior of the ionosphere, particularly as it affects long-range radio transmissions, is the goal of the Canadian ISIS satellite, launched by the National Aeronautics and Space Administration Jan. 30.

Experiments aboard the satellite are designed to measure radiations, particles and temperatures, and correlate them with radio signals sent over various frequencies and bounced off the ionosphere at different distances. The satellite's elliptical orbit varies from 356 to 2,184 miles above the earth, almost exactly as planned.

The first satellite launch in the Canadian-U.S. joint ionospheric program, which began almost 10 years ago,

was Alouette 1, orbited by NASA in 1962. Next came a double launch, consisting of Canada's Alouette 2 and the U.S. Explorer 31. The latest addition, the first International Satellite for Ionospheric Studies, carries experiments from both countries on the Canadian-built probe. Two future additions, planned at about one-year intervals, will make similar measurements, but one from a 1,000-mile circular orbit and the other possibly from a higher polar orbit.

COMMUNICATIONS

Intelsat 3 launched

The first in the Intelsat 3 series of communications satellites was successfully launched Feb. 5, following a previous attempt which failed last Sept. 18 due to booster malfunction.

Capable of handling 1,200 two-way telephone conversations, or four television programs, simultaneously, the initial satellite will more than double the number of phone and TV links across the Pacific, where it is stationed in synchronous orbit. Two satellites in the series are to be placed over the Atlantic and one over the Indian Ocean.

Operated by the 63-nation International Telecommunications Satellite Consortium, the first satellite will link ground stations on the U.S. mainland, Hawaii, Thailand, Australia, Japan and the Philippines.

An Intelsat 4 series, with a total, four-satellite capacity of as many as 44,000 conversations, is planned for the early 1970's (SN: 9/14, p. 259).

ORBITAL MECHANICS

Satellite decay

Explorer 1, the first satellite launched by the United States, is now expected to reenter the earth's atmosphere and burn up in about April 1970, some seven years after it was originally predicted to decay.

The early estimates, made shortly after the satellite's launch on Jan. 31, 1958, were made when little was known about atmospheric drag. The new estimate is that of Dr. Luigi Jacchia of the Smithsonian Astrophysical Observatory in Cambridge, Mass.

COMMUNICATIONS

Tri-service Comsat launched

The largest U.S. communications satellite ever built, designed to test a system that will let military field commanders in forward positions keep in touch with ships and aircraft, was launched Feb. 9 from Cape Kennedy.

The initial Tactical Communications Satellite was designed to carry 10,000 simultaneous conversations, almost eight times that of the civilian Intelsat 3, launched three days before. The 1,600-pound satellite (two and a half times as heavy as Intelsat 3) is to be a tri-service project, serving the Air Force, Army and Navy. It was aimed at a near-synchronous orbit over the Pacific.

A series of six small test satellites, designed by Massachusetts Institute of Technology's Lincoln Laboratory, preceded TacComSat trying various experimental communications techniques as long ago as February of 1965.