They were followed by the U.S. Air Force and the Royal Canadian Air Force. More recently, nearly all the air forces in the Western World have adopted arresting gear. Military aviation has used a number of engagement systems including a "pop-up" barrier, a hook and cable, and a net.

Arrestment of large transport aircraft also is not new. The application of arresting gear to civil aviation began some 10 or 11 years ago. The Federal Aviation Agency sponsored a feasibility test program in 1958 to evaluate the possibility of arresting multiengine transports.

This program culminated in 1962 in the arrestment of a tailhook equipped Boeing 720. From 1962 to 1967—a 5-year period—there was no progress toward adoption of arresting gear for civil use.

The latest development in the field of civil emergency arresting gear has been a test program sponsored by the French Ministry of Civil Aviation.

This program has been oriented toward evaluation of the feasibility of use of a nylon net to engage a multiengine jet transport. A net, capable of engaging a Boeing 707, has been designed and built, and was tested in the United States in October and November of 1967.

The French Government and the French Ministry of Civil Aviation are continuing their program with the actual engagement of a Caravelle scheduled to take place at Toulouse, France, in the near future. The French are so convinced of the necessity for arresting gear protection that a net system is being installed at Toulouse prior to the flight of the French/British supersonic transport.

The recognition of the requirement for arresting gears for civil airports is not a purely national prerogative as evidenced by the subject appearing on the agenda of the Fifth Air Navigation Conference of the International Civil Aviation Organization, which met in Montreal, Canada, from November 14 to December 15, 1967. During this conference France and the United Kingdom stressed the development of arresting systems and were ready to lead in the establishment of criteria and a "civil operational requirement."

The United States, through participation in a preliminary working group, eliminated the statement of a "civil operational requirement" from the working group report. The United States, while stressing interest in the development of any safety device, including arresting systems, convinced the meeting that, in the absence of a "civil operational requirement," further action beyond advice would be premature.

The state-of-the-art has reached the point where arresting gear, capable of stopping today's large civil transports, is available now. However, there is no program or plan in existence in the United States today to authorize the use of arresting gear on civil airports.

The position of the Federal Aviation Administration, according to an article by Ed Hudson in the New York Times of October 6, 1967, was that the FAA had never taken action to require the use of arresting gear; also, that officials believed that "equivalent safety" could be provided at less cost by other approaches, including grooving runways, to increase breaking effectiveness and developing better thrust reversers for jet engines.

These improvements are certainly in order but they are not going to prevent overruns.