

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 440

SHAPE, SIZE AND DIRECTION OF OPERATION
OF LEVER CONTROLS ON AIRCRAFT

1st EDITION

April 1969

Withdrawn in 1982

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Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 440, *Shape, size and direction of operation of lever controls on aircraft*, was drawn up by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, the Secretariat of which is held by the British Standards Institution (BSI).

Work on this question led to the adoption of a Draft ISO Recommendation.

In May 1960, this Draft ISO Recommendation (No. 369) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Belgium	Israel	Spain
Canada	Italy	Sweden
Chile	Japan	United Kingdom
Colombia	Netherlands	Yugoslavia
Czechoslovakia	New Zealand	
Greece	Romania	

One Member Body opposed the approval of the Draft :

Germany

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in April 1969, to accept it as an ISO RECOMMENDATION.

SHAPE, SIZE AND DIRECTION OF OPERATION OF LEVER CONTROLS ON AIRCRAFT

1. In general, the direction of operation of aircraft lever controls should be in accordance with the principle that forward or upward movement of controls tends to increase the performance of the component or aircraft.
2. For the following aircraft controls, where actuated by a lever, the shape and general proportions of the control knob or handle of the lever should approximate closely to those indicated in Table 1. The direction of the operation of the lever should also comply with that indicated in Table 1.

Throttle control	}	See page 4
Mixture control		
Engine supercharger control		

Air intake control	}	See page 5
R.P.M. control		
Ignition		
Fuel shut-off		

Emergency shut-off and fire extinguisher control	}	See page 6
Air brake		
Landing flaps control		

Parachute brake	}	See page 7
Spoiler		
Landing gear control		

3. For aircraft controls other than those included in Table 1, the control knobs or handles of the lever should be of a shape different from those shown in Table 1.
4. Where braking propellers are fitted, operation should be by pulling the throttle back past normal "throttle closed" position to give progressively greater reverse thrust.
5. Operation of a trimming device by levers should result in movement of the aircraft in the same direction. Operation by rotary control should be in accordance with Table 2.
6. Only emergency controls should be coloured red.