

The cooling system (30) for an aircraft engine (10) comprises a channel (32) that draws off cold air in the secondary air flow (200), and a heat exchanger (34) located in the channel (32) and in which hot air circulates. The channel (32) comprises: a supply pipe (322) and an evacuation pipe (326) fixed to the nacelle (324), an intermediate box (324) located between the supply pipe (322) and the evacuation pipe (326), fixed to the engine (10), and in which the heat exchanger (34) is placed. Application to cooling of hot parts (22) in an aircraft engine (10).