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Abstract	<p>On all currently flying Airbus aircraft the functionality of the High Lift Systems was focused on providing lift augmentation for the low speed flight phases. Automatic functions were mainly introduced on classic High Lift Systems for protecting the aircraft structure from excessive loading (e.g. flaps load relief function) and for protecting the aircraft from consequences of certain erroneous pilot commands during the flight (e.g. cruise baulk functions). This article focuses on the enlarged functional flexibility and complexity of the A350XWB flap system, which provides several additional functionalities that improve the overall aircraft performance. The A350XWB flap system provides means for adjusting the center of lift in chord and in span direction and allows performing the lateral compensation for undesired roll movement. This functional enlargement is mainly based on the new feature of differential flap settings, i.e. the ability to position the inner and outer flap independently from each other, and on the comparatively simple dropped hinge kinematics. The maximum lift performance of the dropped hinge kinematics is supported by another novelty of the A350XWB High Lift System, which is the active gap control by means of drooping the spoilers according to the actual flap position. This gap control is realized by the fly-by-wire Primary and High Lift flight control systems.</p>