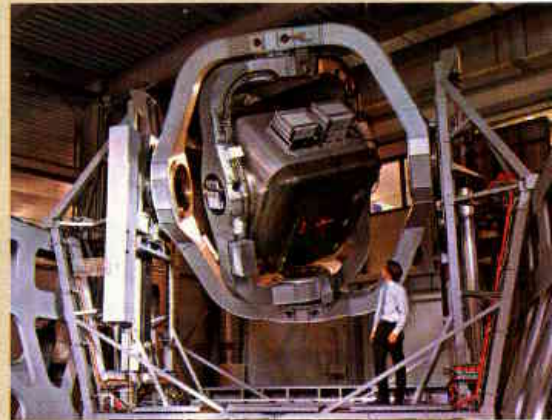


DISORIENTATION DEMONSTRATOR

TNO Defense, Security and Safety of the Netherlands expects to make significant inroads into handling pilot disorientation via its newly opened six-degrees-of-freedom (DoF) moving base flight simulator at its Soesterberg facility. Known as Desdemona, the simulator was developed by Austrian-based AMST in collaboration with TNO. The cabin is suspended in a freely rotating gimbaled system (offering three DoFs through more than 360 deg.) which, as a whole, can move 3 ft. up and 3 ft. down vertically along a heave axis

(the fourth DoF) and horizontally over a distance of 24 ft. along a linear arm (the fifth DoF). To provide sustained centripetal acceleration (the sixth DoF, between 0-3g), the linear arm can spin around a central yaw axis.

Combined onset cueing along the x-, y- and z-axes (like a hexapod simulator) with sustained acceleration cueing up to 3g (like a human centrifuge-type dynamic flight simulator) can be achieved. The cabin has a 120 X 30-deg. out-the-window visual system. Its interior can be configured for several aircraft types (including the F-16 Mid-Life Update M3/M4, the Eurofighter Typhoon and a generic vehicle). It also can be used in standalone mode or integrated within TNO's four-cockpit mission simulation.



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