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'Feathers' can up plane efficiency

London: Coating the rigid wings of airplanes with artificial bristles that mimic feathers could make them more efficient, experts have suggested.

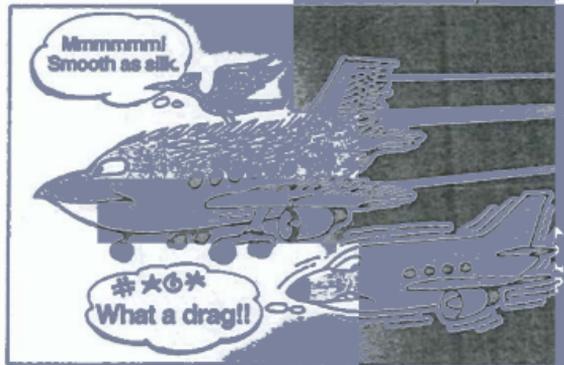
According to a report in *New Scientist*, an Italian team has demonstrated how feather-like structures help reduce drag on a cylinder and says they could have the same effect on underwater and aerial vehicles. Alessandro Bottaro at the University of Genoa is more interested in how a set of smaller feathers, called coverts, keeps birds flying efficiently.

Bottaro's team added synthetic coverts to a computer model of a 20-centimetre-diameter cylinder and put it in

a virtual wind tunnel.

Their synthetic feathers are modeled as rigid keratin bristles 4 to 6cm long and 0.5mm in diameter, coating the cylinder at a density of three fibres per

Ajit Niran



square centimeter. As the wind speed increased the bristles started to vibrate in a similar way to real covert feathers, reducing the drag on the cylinder by 15%. AGENCIES