

Escort tugs: the future??

The tugs are
“escort tractor tugs”
meant to follow ships
passing through
confined waters

The escort tug is tethered
to the assisted ship
for speeds up to 10-11 kn



Both tugs are remote-controlled at the pilot's orders
by a tug master.



Obviously, **escort tugs will be used more and more around the world** in the future to increase safety at sea for some types of ship in some dangerous areas.

Introduction of the model tugs in our courses is a major advance as it allows experimentation with emergency shiphandling when mechanical failures occur on ships:

- rudder failures
- engine failures

Two tugs were introduced in 2000 at the request of several US pilotages. A third tug was introduced in 2006 and includes the Voith Schneider **Turbo Fin**.

One of the tugs is an Azimutal Stern Drive (ASD) with a Z-peller propulsion system. Two tugs have Voith Schneider propulsion (VSP). They can provide a bollard pull of over 100t, but are usually set to 50 to 70t. This is decided every morning with the students before starting the manoeuvres.

The tugs are remote-controlled by a professional tug master at the pilot's orders.

This is not reproduced on numerical simulators ... nor are the typical tug manoeuvres: pure and powered indirect modes, jackknife, push-pull, driving and flying to steering position, etc.