

New British Sub

Astute







This is the British Royal Navy's newest class of submarine, the Astute. And this is what the nuclear-powered behemoth can do: generate its own air and water; sit in the English Channel and fire cruise missiles at North Africa; but perhaps the most extraordinary feature of the British-built sub is that it will never need to be refuelled throughout its 25-year lifespan, meaning it can sail round the world 40 times without surfacing—if your seamen don't need feeding, that is.

The Brits have put in an initial order for three of the subs—a snip at \$2.33 billion each—and each one is expected to enter into service in 2009, 2010 and 2011. The contractor, BAE Systems, in Barrow, says it learned a lot from US sub builder Electric Boat —namely to build sections of the sub vertically (hence the 12-story construction towers at the plant) which saved on manpower.

Weight: 7,800 tons

Length: 97m (318 feet)

Time to build: 6 years, 4 months

Power: pressurized water reactor, fueled for life

Crew: 98

Astute Combat Management System (ACMS) receives data from the sonars and other sensors and, through advanced algorithms and data handling, displays real time images on the command consoles.

Tomahawk Block IV cruise missile from Raytheon fired from 533mm (20 inches) torpedo tubes (range 1,000 miles, flies at 533mph)

I-band navigation radars

Thales Underwater Systems Sonar 2076

Atlas Hydrographic echosounder, the DESO 25, is capable of precise depth measurements down to 10,000m. (32,808 feet, about 6 miles)

Rolls Royce PWR 2 pressurized water reactor

2 Alsthom turbines

Rolls Royce pump jet propulsor



