

Turkish company to use Canadian technology

Canadian west coast tug and barge transportation technology has been introduced into the Mediterranean area, where a Turkish company recently completed the sea trials of a system to be used later this year in the coastal forestry industry.

Seka Adneiz Muesse-sisi, a Turkish government agency, will use a tug and three barges to carry logs from Antalya to a new Canadian-designed pulp and saw mill at Tasucu, a distance of about 180 nautical miles, according to Gordon Passmore,

senior naval architect with Peter S. Hatfield Ltd., the Vancouver, British Columbia company commissioned to design the marine system. This company is well known for the design of marine transportation systems carrying a variety of commodities, as well as vessels and equipment used for offshore oil and gas exploration.

The tug and barges were built by the Sedef Gemi Endustrisi AS shipyard at Gebze, about 60 kilometres east of Istanbul. When the system is in full operation, annual capacity will be about 350 000 cubic metres of logs.

Powered by two 850-horsepower diesel engines, and with a crew of nine housed in air conditioned quarters, the tug will normally tow only one barge, but it may be required to pull the entire fleet at times.

Cargo on the all-welded steel barges is carried on deck, retained by high, externally stiffened, steel boxes. Full-width stern doors can be raised or lowered hydraulically in less than five minutes. Until now, Turkey has relied almost exclusively on small ships of up to about 6 000 deadweight tonnes for coastal work.



Tug built for Turkish coastal forest industry is powered by two 850-horsepower engines and carries a crew of nine.

US stamp of approval to Canadian canola oil

Canola, a Canadian crop that has made its way from the farms of western producers and into cooking oil in Canadian homes, has crossed a hurdle that could put it into more kitchens throughout the globe.

After five years of study, the United States Food and Drug Administration has agreed to give Canadian canola oil a stamp of approval for use in food products ranging from frozen french fries to cake mixes and margarine.

The announcement was made last month by Paul Robinson, the US ambassador to Canada.

Oil crushed from canola, the name given to improved Canadian varieties of rapeseed, has been approved for use in foods in Canada for years.

The first canola variety was licenced

for use in Canada in 1968 and was quickly dubbed the Cinderella crop for its quick rise to prominence on prairie farms. Oilseed now ranks in importance behind only wheat and barley.

However, the only major foreign customer for canola seed has been Japan, which accounts for about 90 per cent of all canola seed exports. India and Algeria are the largest canola oil importers.

The concern in some countries has been over a fatty ingredient called erucic acid that is contained in rapeseed and has been linked with heart problems in rats.

Dale Adolphe, market development co-ordinator of the Canola Council of Canada, said western farmers and canola processors will now be able to export into the United States.

Computer aids marine radar system

Researchers at McGill University in Montreal have developed a new marine radar system which they hope will become valuable aboard large ships, super-tankers, and even on offshore oil drilling platforms throughout the world, reports *The Globe and Mail*.

Geoffrey Austin, a physics professor and director of the McGill University Weather Radar Observatory in Ste. Anne de Bellevue, west of Montreal, and colleagues Ernest Ballantyne and Mike Riley have brought high-speed computer processing imagery, used for years now in weather and air traffic control radars, to marine radar.

Radar signals

When water becomes rough, radar signals returned by waves are different from one moment to the next because of constant wave movement. These waves cause "sea clutter" on the screen of a conventional radar system, and the fading images become a problem for users because "they can't see the targets they're looking for", Mr. Austin said.

Another problem with a conventional marine radar system is that its antenna turns 360 degrees every two seconds, yielding a large amount of information — not all useful — which can be sent by shore-based radar vessel traffic management centres to another location only by using an expensive microwave communication link.

Stores radar pictures

The McGill group has solved the problems by using a 16-bit microcomputer to store sequential radar pictures in memory. "In two seconds the waves have moved, but the targets won't have and a ship won't have significantly moved," Mr. Austin said.

Thus, instead of producing the instantaneous fading image like a conventional radar, the computer both eliminates sea clutter and displays a non-fading colour radar picture on a video screen, making targets much more easy to pick out.

The computer also reduces the amount of information that needs to be recorded and displayed — enough so that a relatively low-cost telephone line can be used for communications instead of the microwave link.

The radar system can also be used aboard ships for automatic navigation through harbours and seaways such as the St. Lawrence.