

used to develop a historical rate of marine casualties in VTS areas to determine the effectiveness of AIS as a mitigating factor.

The estimated total present value benefit of the final rule is \$24.4 million (2003–2012). An estimated present value \$13.3 million is for the U.S. flag SOLAS fleet, \$11.1 million is for the domestic, non-SOLAS fleet in VTS areas. We did not find any quantified safety benefits for the foreign, non-SOLAS fleet.

### Security Benefits

This final rule is one of six final rules that implement national maritime security initiatives concerning general provisions, Area Maritime Security (ports), vessels, facilities, Outer Continental Shelf (OCS) facilities, and AIS. The Coast Guard used the National Risk Assessment Tool (N–RAT) to assess benefits that would result from

increased security for vessels, facilities, OCS facilities, and areas. The N–RAT considers threat, vulnerability, and consequences for several maritime entities in various security-related scenarios. For a more detailed discussion on the N–RAT and how we employed this tool, refer to “Applicability of National Maritime Security Initiatives” in the temporary interim rule titled “Implementation of National Maritime Security Initiatives” (68 FR 39243) (part 101). For this benefit assessment, the Coast Guard used a team to calculate a risk score for each entity and scenario before and after the implementation of required security measures. The difference in before and after scores indicated the benefit of the proposed action.

We recognized that the final rules are a “family” of rules that will reinforce and support one another in their implementation. We have ensured,

however, that risk reduction that is credited in one rule is not also credited in another. For a more detailed discussion on the benefit assessment and how we addressed the potential to double-count the risk reduced, refer to “Benefit Assessment” in the temporary interim rule titled “Implementation of National Maritime Security Initiatives” (68 FR 39274) (part 101).

We determined annual risk points reduced for each of the six final rules using the N–RAT. The benefits are apportioned among the vessel, facility, OCS facility, area, and AIS rules. As shown in Table 1, the implementation of AIS for the affected population reduces 1,422 risk points annually through 2012. The benefits attributable for part 101, General Provisions, were not considered separately since this part is an overarching section for all the parts.

TABLE 1.—ANNUAL RISK POINTS REDUCED BY THE FINAL RULES

Maritime entity	Annual risk points reduced by final rule				
	Vessel security	Facility security	OCS facility security	AMS	AIS
Vessels .....	778,633	3,385	3,385	3,385	1,317
Facilities .....	2,025	469,686	.....	2,025	.....
OCS Facilities .....	41	.....	9,903	.....	.....
Port Areas .....	587	587	.....	129,792	105
Total .....	781,285	473,659	13,288	135,202	1,422

Once we determined the annual risk points reduced, we discounted these estimates to their present value (7 percent discount rate, 2003–2012) so that they could be compared to the costs. We presented cost effectiveness,

or dollars per risk point reduced, in two ways: First, we compared the first-year cost and first-year benefit because first-year cost is the highest in our assessment as companies develop security plans and purchase equipment.

Second, we compared the 10-year present value cost and the 10-year present value benefit. The results of our assessment are presented in Table 2.

TABLE 2.—FIRST-YEAR AND 10-YEAR PRESENT VALUE COST AND BENEFIT OF THE FINAL RULES

Item	Final rule				
	Vessel security	Facility security	OCS facility security	AMS	AIS *
First-Year Cost (millions) .....	\$218	\$1,125	\$3	\$120	\$30
First-Year Benefit .....	781,285	473,659	13,288	135,202	1,422
First-Year Cost Effectiveness (\$/Risk Point Reduced) .....	279	2,375	205	890	21,224
10-Year Present Value Cost (millions) .....	1,368	5,399	37	477	26
10-Year Present Value Benefit .....	5,871,540	3,559,655	99,863	1,016,074	10,687
10-Year Present Value Cost Effectiveness (\$/Risk Point Reduced) .....	233	1,517	368	469	2,427

\* Cost less monetized safety benefit.

Although we have quantified these security benefits relative to AIS, the N–RAT is limited in its ability to measure benefits attributable to intelligence or information gathering. These limitations are discussed in the

“Assessment Limitations” section in the preamble of the temporary interim rule titled “Implementation of National Maritime Security Initiatives” (USCG–2003–14792).

Congress mandated an AIS carriage requirement on domestic (non-SOLAS) vessels in 46 U.S.C. 70114, and provided an explicit phase-in schedule for AIS in section 102(e) of the MTSA. Strictly upon consideration of