MEMO

TO: Tom Althouse
Chair, RVOC Safety Committee

FROM: Matt Hawkins

SUBJECT: Van Security and the Container Security Initiative (CSI)

DATE: October 7, 2003

The information below is based on a *Pacific Maritime* article (Feb 2003 issue) and further investigation on container security.

SHORT TERM:

There was an RVOC e-mail discussion earlier in the year about US Customs requiring "sea carriers" to file cargo manifests in a timely fashion. It was determined this did not apply to us as research vessels – we carry only "science equipment" (vans, etc.). However, security questions may arise while a van is enroute to one of our vessels – while on a container ship, a lab van would be considered "cargo".

In the short term, it appears that this is a bigger issue for the transport companies than it is for us.

"Container Security Initiative" (CSI) – Under this new plan, cargo containers (an thus our vans) will be automatically classified by "risk level" based on information in the bill of lading. This computerized process uses information such as destination, country of origin, ports of landing, owner, US importer, description/value of contents, etc. If classed as "high risk", it will be subject to X-ray scanning when it hits the dock. If X-Ray scanning shows anything suspicious, only then would it be opened and searched.

There is very low likelihood that our science vans would be classified as "high risk". The only worry is if it was shipped back to the US from a perceived terrorist-supporting country (Somalia, Philippines, North Korea, etc.), or the sea carrier happens to land at one of these counties while enroute. This seems a remote possibility given our reluctance to make port calls in these places. It also seems unlikely that this one criteria alone would be enough to raise a van to the "high risk" category.

In the unlikely event of a search, our vans can be opened by cutting/unlocking the padlock on the cargo doors, or unlocking one of the personnel doors. Nothing additional required.

Recommendation: US Customs is apparently relying on the transport industry to ensure security of the goods they ship. They have established *the Customs Trade Partnership Against Terrorism*, or **CTPAT**. It would seem prudent to advise ship operators, scientists, and technical groups to ask if the shipping companies they use are **"CTPAT compliant"**. The article suggests that cargo sent by companies that are compliant move through Customs virtually non-stop. By going with only CTPAT compliant companies, we might greatly reduce the risk of vans being searched or delayed, and thus having an impact on science operations.

LONG TERM:

Two things are on the horizon – "Radiation Portals" and "Smart Containers".

1) Radiation Portals – Container ships would have to pass through radiation detection systems before entering port. It is unclear if this requirement would be for all CARGO ships or ALL VESSELS. If all vessels, then the only problem I foresee is that radio-isotopes aboard our ships might set off the alarm. It is unclear to me if the radio-isotopes normally used by science would fall below the detection threshold of such a system. If not, I think (hope) the overall system would be such that one could "declare" the isotopes before hand.

   The only thing we can do is watch for the implementation of such systems and advise those establishing them of research vessel requirements. There may actually be such a system undergoing tests in the approaches to New York Harbor at this time.

2) Smart Containers – This involves improvement to the seals on containers (now just a padlock) such that they cannot be tampered with. Apparently, the technology is getting close on this. A DC-based Working Group from both industry and government is working on a list of recommendations.

   If such technologies are introduced, we MAY have to add them to our vans to ship them overseas. This remains to be seen depending on the recommendations and what is actually implemented. It may be as simple as the shipping company putting a more advanced adhesive strip/seal over all openings to indicate tampering – the strip also being able to detect radiation much like the tags lab workers wear to indicate exposure. Cost would simply be added to the shipping bill. On the other hand, it may be as advanced as an electronic device.

   In any event, these security solutions should be easily retrofitted – no wholesale changes should be required to either our current van design or the standard shipping container. Given the volume of containers that are shipped every day throughout the world, it would seem the final solution(s) would have to be VERY inexpensive per container, or the economic effect would be too costly – and thus not acceptable to the industry.

   All we can do is watch and wait on this as well.