BACKTRACKS OF SHIPS DURING TRANSIT OPERATION (OPE 2015)
TRANSIT OPERATION BETWEEN SPAIN AND MOROCCO
ALGEIRA BOARDING AREAS FOR CARS AND PASSENGERS
ARRIVING TO THE SHIPS
CARS AND VEHICLES EXIT FROM ALGECIRAS PORT (15.06.15 → 15.08.15)

<table>
<thead>
<tr>
<th></th>
<th>SHIP’S ROTATIONS</th>
<th>% (*)</th>
<th>PASSENGERS</th>
<th>% (*)</th>
<th>VEHICLES</th>
<th>% (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALGECIRAS - TANGER MED</td>
<td>2 076</td>
<td></td>
<td>497 402</td>
<td></td>
<td>135 569</td>
<td></td>
</tr>
<tr>
<td>ALGECIRAS - CEUTA</td>
<td>1 516</td>
<td></td>
<td>249 313</td>
<td></td>
<td>52 288</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>3 592</strong></td>
<td>71.5 %</td>
<td><strong>746 715</strong></td>
<td>55.7 %</td>
<td><strong>187 857</strong></td>
<td>60.6 %</td>
</tr>
</tbody>
</table>

(*) Over the total amount of all the Spanish Ports (Almería, Motril, Málaga, Tarifa, Algeciras)
SOME PRACTICAL APPLICATIONS WITH THE AIM TO IMPROVE THE SAFETY OF PASSENGER VESSELS
AS TIME GOES BY, SITUATION QUICKLY WORSENS
SOLAS74 CONVENTION
COMMENT
FOCAL POINT EXAMPLE OF LACK OF SAFETY:
TWO SOURCES OF POWER BUT ONLY ONE WAY TO
GET ESSENTIAL EQUIPMENT

AUXILIARY GENERATORS & MAIN ELECTRICAL
SWITCHBOARD
1ST.- SOURCE

BRIDGE: NAVIGATION AIDS & ESSENTIAL
EQUIPMENT

LOCAL OF EMERGENCY GENERATOR & EMERGENCY
ELECTRICAL SWITCHBOARD
2ND.- SOURCE
PARAMOUNT HELP TO CAPTAIN

THE HELP OF A EASY DAMAGE CONTROL PLAN.
SHIP DAMAGES AFTER COLLISION

NEW GLORY

MEDITERRANEA
EFFECTS AND CONSEQUENCES OF DAMAGES
HOW MANY FLOWDING COMPARTMENTS CAN THE SHIP WITHSTAND
THE CAPTAIN´S DILEMA: EVACUATE OR NOT
A QUICK DECISION
WHAT MEANS WE HAVE TO EVACUATE THE INJURED PERSONS
ARE EVACUATION MEANS STILL AVAILABLE AND READY TO USE?
DAMAGES FOUND AT DAY LIGHT
TIME IS MORE THAN GOLD
In case of flooding it should be very difficult to evaluate, by calculation on board, the possibility of withstand of the vessel. Therefore it should be paramount for captain to ascertain, in a easy way, if the vessel either sinks or survives, after being fled several compartments.

Then, it should be a great help to have on board a clear and explicit “damage survivability information”, for instance, with two water lines (longitudinal & transverse) marked for each damage situation.
DAMAGED BULB
BULB DAMAGED
BULB COMPARTMENT FORMS PART OF THE FORE PEAK TANK
REPAIR OF BULB AFTER DAMAGES DUE TO COLLISION

BREAKING OF THIS BULB COMPARTMENT MEANS FLOODING OF THE FORE PEAK TANK. THIS INVOLVES AND DERIVES THAT IF THE VESSEL IS ONLY DESIGNED FOR TWO COMPARTMENTS IF THE VESSEL HAS A TRANSVERSAL BULKHEAD BROKEN, VESSEL WILL LIKELY SINK.
BULB REPAIRS: COST AND DELAYS
D R Y D O C K R E P A I R S T O O E X P E N S I V E
IF BOW BULB IS BROKEN, FORE PEAK TANK IS FLOWDED
WATERTIGHT TRANSVERSE BULKHEAD
WATER TIGHT TRANSVERSAL SECTION FITTED WITH A CHECKING VALVE
IN CASE OF BLACK OUT THE MAGNETIC COILS THAT KEEP THE FIRE DOOR OPENED WILL BE WITHOUT VOLTAGE LEADING TO DOORS CLOSE HASTLY AND THEREFORE IT CAN CRUSH AND BEAT A PERSON.

FOR AVOIDING UNNOTICED ACCIDENTS THESE COILS SHOULD BE FED THROUGH A SET OF BATTERIES, ACHIEVING THAT THEY ARE ALWAYS FED ELECTRICALLY.
MAGNETIC COILS ELECTRICALLY FEEDING FROM MAIN SOURCE
HSC PASSENGER VESSEL LOST OF CONTROL
THE VESSEL MAY LOSE HER CONTROL DUE TO AN INCREASE OF ELECTRICAL CURRENT. (THERMAL SWITCHES CAN OPEN THE CIRCUIT)
TARJETAS POME

TARJETAS PIME
POWER SOURCES FOR STEERING

- This 24Vdc power is double, comes from normal service 24v dc and essential service of 24 Vdc, it was in the output of the circuit breaker where the fault (the increase of current) was detected and that provoked the jumping of the circuit breaker, because of the dirty/loose terminal.

- SOLAS 74, CHAPTER II-1 demands only short circuit protection for the electrical circuits of the Steering Gear. Nevertheless these vessels must comply with HSC Code.
EMERGENCY POWER SUPPLY FOR LIVE SAVING APPLIANCES AS DAVITS (LIFE BOATS AND LIFE RAFTS)

- It is no required to feed these davits from the emergency generator, therefore, in case of abandon a ship, likely the main source of electrical power supply will be out of order. Then lifeboat davits will remain without electrical power supply.