Appendix A: Assumptions Driving Calculations

| Subchapter | K Reg | T Reg | Title | Assumptions |
| :---: | :---: | :---: | :---: | :---: |
| Recordkeeping |  |  |  |  |
| K | 115.310 |  | Certification expiration date stickers | The application of the stickers takes about 5 minutes ( 0.08 hrs.) and occurs every 3 years. All K vessels must do this. The work is done by an E1-5, outside government. |
| K | 116.520 |  | Emergency evacuation plan | Posting the plan is done once, by an $\mathrm{O} 1 / 2$ level individual, and takes 0.5 hrs. It only affects new K vessels. |
| K | 116.530 |  | Fire control plan | As above |
| K | $116.610(\mathrm{~g})(4)$ |  | Ventilation ducts | Marking ventilation fire dampers is done once only and takes 10 minutes (0.17 hrs). It should only affect new K vessels and is performed by an E-1-5. |
| к | 122.282 |  | Logbook for vessels of >19.8 mtrs (65ft) with overnight accomodation for $>49$ passengers | Approximately 2 entries, each taking 1 minute ( 0.02 hrs), are made in the logbook every trip. Affected vessels make 1 trip per day and make trips on $75 \%$ of the year ( 274 days). Logbook is maintained by an $\mathrm{O}-1 / 2$ |
| K | 122.515 |  | Passenger safety bill | Identical assumptions to 116.520 |
| K, T | 115.302 | 176.302 | Certificates and Permits | It takes 10 minutes to post these. Posting is done once and is done by an E- 1-5. All new T\& K vessels must do this. |
| K, T | 115.306 | 176.306 | Stability letter | Posting takes 5 minutes. All other assumptions are as for 115.302 and 176.302 , above. |
| K, T | 115.710 | 176.710 | Inspection and testing prior to hot work | The inspection, as well as the preparation of the certificate, takes 15 minutes. The work is performed by an $\mathrm{O}-3 / 4$ level individual. All K \& T vessels need this once per year. |
| к, т | 115.810 (b) | 176.810 (b) | Fire protection | The inspection occurs every 3 years. The inspection and preparation of the certificate require one hour for completion. All other assumptions are as for 115.710 and 176.710. |
| K, T | 120.220 (d) | 183.220 (d) | General safety provisions | Marking all electrical circuits and equipment takes 30 minutes, is performed once by an $\mathrm{E}-1-5$, and affects all new K \& T vessels. |
| K, T | 121.420 | 184.420 | Charts and nautical publications | Assembling all the necessary charts takes 2 hours and is performed annually. All K \& T veseels require this and the work is performed by an $\mathrm{O}-1 / 2$. |
| K, T | 121.506 | 184.506 | Emergency broadcast placard | Posting this takes 5 minutes and is done once by an $\mathrm{E}-1-5$, for all new K and T vessels per year. |
| K, T | 122.220 | 185.220 | Records of a voyage resulting in a marine casualty | Data from MSMS show 181 and 525 marine casualties in 1998 for $\mathrm{K} \& \mathrm{~T}$ vessels respectively. Maintaining and assembling records takes 1 hour per casualty. The work is done by an O1/2. |
| K, T | 122.280 | 185.280 | Official logbook for foreign voyages | Only $5 \%$ of K \& T vessels regularly make foreign voyages. Approximately 2 entries, each taking 5 minutes ( 0.08 hrs ), are made in the logbook every day on a voyage. Voyages are 7 days long and are undertaken 26 times per year. Logbook is maintained by an $\mathrm{O}-1 / 2$. |
| K, T | 122.340(c) | 185.340(c) | Vessels carrying vehicles | Assume $5 \%$ of new K\&T carry vehicles. It takes 20 minutes for each one to post all the "No Smoking" signs. The work is done by an E-1-5. |
| K, T | 122.402 | 185.402 | Licenses | It takes 30 minutes to assemble licenses. The work is done by an $\mathrm{O}-1 / 2$. All $\mathrm{T} \& \mathrm{~K}$ vessels must do this once annually. |
| K, T | 122.506 | 185.506 | Passenger safety orientation | All K\&T vessels have to do this before every trip. The announcement is made by an $\mathrm{O}-1 / 2$. There is 1 trip made per day for 274 days of the year (non foreign voyages $-80 \%$ of pop'n). Vessels that regularly operate on foreign voyages make weekly trips for 26 weeks of the year. The announcement takes 2 minutes. |
| K, T | 122.510 | 185.510 | Emergency instructions | Mounting the instructions takes 5 minutes, is done once by all new K \& T vessels and the work is done by an E-1-5. |
| K, T | 122.514 | 185.514 | Station bill | As for 122.510 and 185.510 above. |
| K, T | 122.516 | 185.516 | Life jacket placards | Posting life jacket placards takes 20 minutes. All other assumptions are as for 122.510 and 185.510 above. |
| K, T | 122.518 | 185.518 | Inflatable survival craft placards | Posting the placards takes10 minutes. "X" have inflatable survival craft. All other assumptions are as for 122.510 and 185.510 above. |
| 3 | 122.602 | 185.602 | Hull markings | Making all the necessary hull markings takes 1 hour, is done once by an E-1-5 for all new K \& T vessels. |
| K, T | 122.604 | 185.604 | Lifesaving equipment markings | Complying with all the requirements here takes 2 hours. All other assumptions are as for 122.602 and 185.602. |
| K, T | 122.606 | 185.606 | Escape hatches and emergency exits | Marking emergency exits and escape hatches takes 10 minutes. All other assumptions are as for 122.602 and 185.602. |
| K, T | 122.608 | 185.608 | Fuel shutoff valves | Marking fuel shutoff valves takes 15 minutes. All other assumptions are as for 122.602 and 185.602. |
| K, T | 122.610 | 185.610 | Watertight doors and watertight hatches | Marking watertight doors and hatches takes 10 minutes. All other assumptions are as for 122.602 and 185.602. |
| K, T | 122.612 | 185.612 | Fire protection equipment | Marking all fire protection equipment takes 2 hrs. All other assumptions are as for 122.602 and 1855.602. |
| K, T | 122.702 | 185.702 | Maintenance | This is done once and is required of all new K \& T vessels that have primary lifesaving equipment (survival craft). Assume the same proportion of new vessels have survival craft. The work is done by an $\mathrm{O}-1 / 2$. |
| к, т | 122.704 ( c) | 185.704(c) | Maintenance of falls | The information collection required - marking the falls- takes 5 minutes and must be performed every 2.5 years. The recordkeeping is done by an E-1-5 for all K \& T vessels. |
| T | 183.320 (d) and (e) |  | Generators and motors | Attaching the nameplates to generators and motors takes 10 minutes per vessel. It is performed by an $\mathrm{E}-1-5$ for all new T vessels and is done once per vessel. The report is made by an O-1/2. |
|  |  |  |  | Reporting |
| K, T | 115.105 (a) | 176.105 (a) | How to obtain or renew | This takes 30 minutes, occurs every 3 yrs., is required for all K and T vessels and is performed by an $\mathrm{O}-1 / 2$. |
| K, T | 115.202 | 176.202 | Permit to proceed | This takes 15 minutes. All K \& T vessels do this once every other year. The application is filled out and submitted by an $\mathrm{O}-1 / 2$. |
| K, T | 115.204 | 176.204 | Permit to carry Excursion Party | Assumptions identical to those of 115.202 and 176.202. |
| K, T | 115.500 (a) | 176.500 (a) | When required | This takes a 5 minute phone call every 3 years. All K \& T vessels are required to do this. The call is made by an $\mathrm{O}-1 / 2$. |
| к, т | 115.612 | 176.612 | Notice and plans required | All K\&T vessels have to be drydocked for safety related repairs or load line examination approximately once every 6 years. The notice and plans are prepared and submitted by an $\mathrm{O}-1 / 2$. |
| K, T | 115.700 | 176.700 | Permission for repairs and alterations | Submitting drawings etc. for alterations and repairs takes 30 minutes and occurs once every other year for all K and T vessels. The submission is performed by an $\mathrm{O}-1 / 2$. Preparation and submission of plans takes 30 minutes. |
| K, T | 115.704 | 176.704 | Breaking of safety valve seals | Reporting takes 10 minutes and is necessary once every 10 years for all K \& T vessels. The reporting is done by an $\mathrm{O}-1 / 2$. |
| K, T | 115.920 ( c) | 176.920 ( c) | Exemption | $80 \%$ of all $\mathrm{K} \& \mathrm{~T}$ do not regularly make foreign voyages. Of these, $50 \%$ do make 1 foreign voyage per year and have to apply for exemption. The time requirement is 30 minutes and performed by an $\mathrm{O}-1 / 2$. |
| K, T | 115.930 | 176.930 | Equivalents | Submitting the request for approval takes 15 minutes. All K \& T vessels do this once per year. The submission is done by an $\mathrm{O}-1 / 2$. |
| K, T | 116.202 | 177.202 | Plans and information required | Submitting all the necessary information takes 1 hour. All K \& T vessels do this once. The individual who does this is an $\mathrm{O}-1 / 2$. |
| к, т | 116.330 | 177.330 | Sailing vessels | Submitting the required documents takes 20 minutes and is required of all new K \& T that are sailing vessels ( $1 \%=1.5$ ). The submission occurs once and is performed by an $\mathrm{O}-1 / 2$. |
| K, T | 116.340 | 177.340 | Alternate design considerations | Submission of the alternate design request takes 20 minutes, occurs once and $10 \%$ of all new K \& T vessels will submit requests. The submission is done by an $\mathrm{O}-1 / 2$. |
| K, T | 122.208 | 185.208 | Accidents to machinery | The report takes 10 minutes to prepare and submit. All $\mathrm{K} \& \mathrm{~T}$ vessels do this once every other year. The submission is performed by an $\mathrm{O}-1 / 2$. |
| K, T | 122.230 | 185.230 | Report of an accident to an aid to navigation | Assumptions identical to those of 122.208 and 185.208. |
|  |  |  |  | Recordkeeping and Reporting |
| K, т | 122.502 | 185.502 | Crew and passenger list | Preparing and submitting the list takes 30 minutes. All K \& T vessels do this prior to trips that meet certain criteria. Assume $50 \%$ of all K \& T vessels need to do this 50 times per year. Submission is by an $\mathrm{O}-1 / 2$. |
| K, T | 122.503 | 185.503 | Voyage plan | Preparing and submitting the list takes 40 minutes. All other assumptions are as for 122.502 and 185.502 above. |
| K, T | 122.504 | 185.504 | Passenger count | Preparing and submitting the list takes 5 minutes. All K \& T vessels do this prior to trips that meet certain criteria. Assume $50 \%$ of all K \& T vessels need to do this 274 times per year. Submission is by an O-1/2. |

## Appendix B: Annual Responses and Respondents

Reporting Requirements

| Subchapter | K Reg | T Reg | Title | Responses |
| :---: | :---: | :---: | :---: | :---: |
| K, T | 115.105 (a) | 176.105 (a) | How to obtain or renew | 2,085 |
| K, T | 115.202 | 176.202 | Permit to proceed | 3,128 |
| K, T | 115.204 | 176.204 | Permit to carry Excursion Party | 3,128 |
| K, T | 115.500 (a) | 176.500 (a) | When required | 2,085 |
| K, T | 115.612 | 176.612 | Notice and plans required | 1,043 |
| K, T | 115.700 | 176.700 | Permission for repairs and alterations | 3,128 |
| K, T | 115.704 | 176.704 | Breaking of safety valve seals | 626 |
| K, T | 115.920 ( c) | 176.920(c) | Exemption | 626 |
| K, T | 115.930 | 176.930 | Equivalents | 6,255 |
| K, T | 116.202 | 177.202 | Plans and information required | 6,255 |
| K, T | 116.330 | 177.330 | Sailing vessels | 1 |
| K, T | 116.340 | 177.340 | Alternate design considerations | 11 |
| K, T | 122.208 | 185.208 | Accidents to machinery | 3,128 |
| K, T | 122.230 | 185.230 | Report of an accident to an aid to navigation | 3,128 |
| Total Annual Responses for this COI |  |  |  | 34,623 |

Populations

| Category | Count |
| :--- | ---: |
| Total Population of K Vessels | 413 |
| Total Population of T Vessels | 5,842 |
| Total Existing Population | $\mathbf{6 , 2 5 5}$ |


| Annual New Entrants K Vessels | 4 |
| :--- | ---: |
| Annual New Entrants T Vessels | 104 |
| Total New Entrants | $\mathbf{1 0 8}$ |


| Largest Grouping of Existing Reporting Annue | 6,255 |
| :--- | ---: |
| Largest Grouping of New Reporting Annually | 11 |
| Total Annual Respondents for this COI | $\mathbf{6 , 2 6 6}$ |


| Annual Respondents |  |
| ---: | ---: |
| Annual Responses | $\mathbf{6 , 2 6 6}$ |
| 34,623 |  |

Appendix C: Industry Time and Costs by Sectior


## Appendix D: Total Estimated Annual Burden from Recordkeeping and Reporting on Industry

| Annual Respondents | $\mathbf{6 , 2 6 6}$ |
| :--- | :---: |
| Annual Responses | $\mathbf{3 4 , 6 2 3}$ |


|  | Hour Burden | Cost Burden |
| :--- | :---: | :---: |
| Recordkeeping | 87,665 | $\$ 6,021,379$ |
| Reporting | 6,139 | $\$ 414,406$ |
| Recordkeeping and Reporting | 305,615 | $\$ 20,629,039$ |
| Total | $\mathbf{3 9 9 , 4 2 0}$ | $\$ 27,064,824$ |


| Total Respondents | $\mathbf{6 , 2 6 6}$ |
| :--- | :---: |
| Total Responses | $\mathbf{3 4 , 6 2 3}$ |
| Total Hour Burden | $\mathbf{3 9 9 , 4 2 0}$ |
| Total Cost Burden | $\mathbf{\$ 2 7 , 0 6 4 , 8 2 4}$ |

Appendix E: Government Time and Costs by Sectior

| Subchapter | K Reg | T Reg | Title | $\left.\begin{array}{\|c\|} \hline \text { Time } \\ \text { burden } \\ \text { (minutes) } \end{array} \right\rvert\,$ | $\begin{array}{\|c} \hline \text { Time } \\ \text { burden } \\ \text { (hours) } \end{array}$ | Frequency | Frequency (numeric) (numeric) | $\begin{array}{\|c} \text { Annual time } \\ \text { burden/ vessel } \end{array}$ | Number of vessels affected | Total annual time burden (hours) | Standard Rate | Associated <br> Wage Rate <br> (\$/hour) | Total time cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (minutes)Recordkeeping(haurs |  |  |  |  |  |  |  |  |  |  |  |  |  |
| K | 115.310 |  | Certification expiration date stickers | 0 | 0.00 | Every 3 years | 3 | 0.00 | 11 K | 0 | E1/5 |  | s0 |
| K | 116.520 |  | Emergency evacuation plan | 30 | 0.50 | One time | 1 | 0.50 | Jew K | 2 | 01/2 |  | S110 |
| K | 116.530 |  | Fire control plan |  | 0.08 | One time |  | 0.08 | ew K | 0 | 01/2 |  |  |
| K | 116.610(g)(4) |  | Ventilation ducts | 0 | 0.00 | One time | 1 | 0.00 | ew K | 0 | E1/5 |  | \$0 |
| K | 122.282 |  | Logbook for vessels of $>19.8 \mathrm{mtrs}$ ( 65 ft ) with overnight accomodation for $>49$ passengers | 0 | 0.00 | Every trip | N/A | 0.00 | ome K | 0 | 01/2 |  | \$0 |
| K | 122.515 |  | Passenger safety bill | 0 | 0.00 | One time | 1 | 0.00 | ew K | 0 | 01/2 |  | 50 |
| K, T | 115.302 | 176.302 | Certificates and Permits | 0 | 0.00 | One time | 1 | 0.00 | ew K \& T | 0 | E1/5 |  | \$0 |
| K, T | 115.306 | 176.306 | Stability letter | 0 | 0.00 | One time | 1 | 0.00 | ew K \& T | 0 | E1/5 |  | \$0 |
| K, T | 115.710 | 176.710 | Inspection and testing prior to hot work | 0 | 0.00 | As needed | N/A | 0.00 | All K \% T | 0 | 03/4 |  | \$0 |
| K, T | 115.810 (b) | 176.810 (b) | Fire protection | 0 | 0.00 | Every 3 years | 3 | 0.00 | All K \& T | 0 | 03/4 |  |  |
| K, T | 120.220 (d) | 183.220 (d) | General safety provisions | 0 | 0.00 | One time |  | 0.00 | New K \& T | 0 | E1/5 |  | 50 |
| K, T | 121.420 | 184.420 | Charts and nautical publications | 0 | 0.00 | Annual | 1 | 0.00 | All K T | 0 | 01/2 |  | \$0 |
| K, T | 121.506 | 184.506 | Emergency broadcast placard | 0 | 0.00 | One time | 1 | 0.00 | New K \& T | 0 | E1/5 |  | s0 |
| K, T | 122.220 | 185.220 | Records of a voyage resulting in a marine casualty | 0 | 0.00 | As needed | 1 | 0.00 | ome K \& T | 0 | 01/2 |  | \$0 |
| K, T | 122.280 | 185.280 | Official logbook for foreign voyages |  | 0.00 | Every voyage | N/A | 0.00 | ome K \& T | 0 | 01/2 |  | s0 |
| K, T | 122.340 (c) | 185.340 (c) | Vessels carying vehicles | 0 | 0.00 | One time | 1 |  | ome New K \& T | 0 | E1/5 |  |  |
| K, T | 122.402 | 185.402 | Licenses | 0 | 0.00 | Annual | 1 | 0.00 | 11 K \& T | 0 | 01/2 |  | s0 |
| K, T | 122.506 | 185.506 | Passenger safety orientation | 0 | 0.00 | Every trip | N/A |  | 11 K \& T | 0 | 01/2 |  |  |
| K, T | 122.510 | 185.510 | Emergency instructions | 0 | 0.00 | One time | 1 | 0.00 | New K \& T | 0 | E1/5 |  | \$0 |
| K, T | 122.514 | 185.514 | Station bill | 0 | 0.00 | One time | 1 | 0.00 | New K \& T | 0 | E1/5 |  | \$0 |
| K, T | 122.518 | 185.518 | Inflatable survival craft placards | 0 | 0.00 | One time | 1 | 0.00 | New T | 0 | E1/5 |  | S0 |
| K, T | 122.516 | 185.516 | Life jacket placards | , | 0.00 | One time | 1 | 0.00 | New K \& T | 0 | E1/5 |  | \$0 |
| K, T | 122.602 | 185.602 | Hull markings | 0 | 0.00 | One time | 1 | 0.00 | New K \& T | 0 | E1/5 |  | 50 |
| K, T | 122.604 | 185.604 L | Lifesaving equipment markings | 0 | 0.00 | One time | 1 |  | Jew K \& T | 0 | E1/5 |  |  |
| K, T | 122.606 | 185.606 | Escape hatches and emergency exits | 0 | 0.00 | One time | 1 | 0.00 | New K \& T | 0 | E1/5 |  | \$0 |
| K, T | 122.608 | 185.608 | Fuel shutoff valves | 0 | 0.00 | One time | 1 | 0.00 | Jew K \& T | 0 | E1/5 |  | s0 |
| K, T | 122.610 | 185.610 | Wateright doors and watertight hatches |  | 0.00 | One time |  | 0.00 | New K \& T | 0 | E1/5 |  | \$0 |
| K, T | 122.612 | 185.612 | Fire protection equipment | 0 | 0.00 | One time | 1 | 0.00 | New K \& T | 0 | E1/5 |  | \$0 |
| K, T | 122.702 | 185.702 | Maintenance | 0 | 0.00 | One time | 1 |  | ome new K \& T | 0 | 01/2 |  | \$0 |
| K, T | 122.704 (c) | $185.704($ c) | Maintenance of falls |  |  | Every 2.5 years | 3 | 0.00 | ome K \& T | 0 | E1/5 |  |  |
| T |  | 183.320 (d) and (e) | Generators and motors | 0 | 0.00 | One time | 1 | 0.00 | New T | 0 | E1/5 |  | \$0 |
| Reporring |  |  |  |  |  |  |  |  |  |  |  |  |  |
| K, T | 115.105 (a) | 176.105 (a) | How to obain or renew | 10 | 0.17 | Every 3 yrs. | 3 | 0.06 | All K \% | 348 | 01/2 |  | 19,113 |
| K, T | 115.202 | 176.202 | Permit to proceed |  | 0.08 | As needed | N/A |  | All K \& T |  | 01/2 |  | \$287 |
| K, T | 115.204 | 176.204 | Permit to carry Excursion Party |  | 0.08 | As needed | N/A | 0.01 | All K T | 52 | 01/2 |  | \$2,867 |
| K, T | 115.500 (a) | 176.500 (a) | When required |  | 0.08 | Every 3 yrs. | 3 | 0.03 | 11 K \& T | 174 | 01/2 |  | \$9,556 |
| K, T | 115.612 | 176.612 | Notice and plans required | 30 | 0.50 | Every 6 years | 6 | 0.08 | All K \& T | 521 | 01/2 |  | \$28,669 |
| K, T | 115.700 | 176.700 | Permission for repairs and alterations | 10 | 0.17 | As needed | N/A | 0.08 | All K \& T | 521 | 01/2 |  | \$28,669 |
| K, T | 115.704 | 176.704 | Breaking of safety valve seals | 10 | 0.17 | As needed | N/A | 0.00 | 11 K \& T | 10 | 01/2 |  | 5573 |
| K, T | 115.920 (c) | 176.920(c) | Exemption | 10 | 0.17 | As needed | N/A | 0.17 | Some K \& T | 2,971 | 01/2 |  | S163,412 |
| K, T | 115.930 | 176.930 | Equivalents | 10 | 0.17 | As needed | N/A | 0.00 | All K \& T | 10 | 01/2 |  | 5573 |
| K, T | 116.202 | 177.202 | Plans and information required | 60 | 1.00 | One time | 1 | 1.00 | New K \& T | 108 | 01/2 |  |  |
| K, T | 116.330 | 177.330 | Sailing vessels | 20 | 0.33 | One time | 1 | 0.33 | Some new K \& T | 0 | 01/2 |  | \$20 |
| K, T | 116.340 | 177.340 | Alternate design considerations | 20 | 0.33 | One time | 1 | 0.33 | Some new K \& T |  | 01/2 |  | S198 |
| K, T | 122.208 | 185.208 | Accidents to machinery | 10 | 0.17 | As needed | N/A | 0.08 | All K \& T | 521 | 01/2 |  | \$28,669 |
| K, T | 122.230 | 185.230 | Report of an accident to an aid to navigation | 10 | 0.17 | As needed | N/A | 0.08 | All K \& T | 521 | 01/2 |  | \$28,669 |
| Recordkepping and Reporting |  |  |  |  |  |  |  |  |  |  |  |  |  |
| K, T | 122.502 | 185.502 | Crew and passenger list |  | 0.02 | All approp. trips | N/A |  | some K \& T | 2,606 | 01/2 |  | \$143,344 |
| K, T | 122.503 | 185.503 | Voyage plan |  | 0.02 | All approp. trips | N/A | 0.83 | Some K \& T | 2,606 | 01/2 |  | S143,344 |
| K, T | 122.504 | 185.504 | Passenger count | 1 | 0.02 | All approp. trips | N/A | 4.15 | Some K \& T | 24,636 | 01/2 |  | \$1,354,957 |
|  |  |  |  |  |  |  |  |  | Total Annual Hours | 35,618 |  | Total Cost | \$1,958,986 |

## Appendix F: Total Estimated Annual Federal Government Cost

| Annual Respondents | $\mathbf{6 , 2 6 6}$ |
| :--- | :---: |
| Annual Responses | 34,623 |


|  | Hour Burden | Cost Burden |
| :--- | :---: | :---: |
| Recordkeeping | 2 | $\$ 128$ |
| Reporting | 5,768 | $\$ 317,214$ |
| Recordkeeping and Reporting | 29,848 | $\$ 1,641,644$ |
| Total | $\mathbf{3 5 , 6 1 8}$ | $\mathbf{\$ 1 , 9 5 8 , 9 8 6}$ |


| Total Respondents | $\mathbf{6 , 2 6 6}$ |
| :--- | :---: |
| Total Responses | 34,623 |
| Total Cost | $\$ 1,958,986$ |

