A recent report by a major European insurance group contained an analysis of shipping losses and accidents worldwide in 2017. The report revealed that the number of losses has fallen by one third over the past ten years, which is very good news. The vast majority of losses are caused by collisions, with a smaller number as a result of grounding and machinery failure. All of those causes have featured in CHIRP Maritime Feedback over the years, and we should all strive to learn the lessons so that the numbers continue to decline.

One in four losses occur in bad weather, so perhaps we could help reduce that figure by paying more attention to securing our ships before they enter a storm or monitoring a likely storm track and making sure we avoid the worst weather.

The report also claims that slightly more losses occur on Fridays than on any other day of the week. The difference is not great, so nobody is suggesting ships should stay in port on Fridays, but it might be wise to pay a little more attention and not allow any ‘end of the week’ feelings to cause you to relax your vigilance.

One disappointing aspect of the report was its claim that between 75% and 96% of accidents are caused by human error. On a superficial level, all accidents are the result of human error – even when equipment breaks down it can be blamed on the humans who designed and built it – but at CHIRP Maritime, we believe that meaningful lessons can only be learned by going beyond the superficial and looking for the underlying causes. It is easy to blame an individual, when we should really be asking why he or she made the mistake which led to the accident. Was it poor training, and do we need to look at improving our institutions of learning? Or was it fatigue, and was the fatigue a result of insufficient manning, or illness, or some other cause? That is why all the reports on our website have been analysed in an attempt to identify the underlying causes of accidents and near misses. And that is why we are investing in research into eyesight and perception. Only by understanding underlying causes will we be able to eliminate the accidents which result from them.

I hope you will never find an example of CHIRP Maritime blaming human error without going further, and I hope the rest of the world will soon join us in our efforts to identify the underlying causes of accidents, incidents and near misses.

This edition of CHIRP Maritime Feedback covers a wide range of incidents, and it is encouraging to see reports from the leisure and fishing sectors. Please keep them coming!

We begin with yet another report of unsafe pilot boarding arrangements with, as the report says, an ‘appalling disregard for safety’. The rules for pilot ladders are clear and well-publicised, yet it seems there are still ships where the message has not been received. We also feature a number of cases where the use of personal protective equipment was ignored, even though it would have been simple to do the right thing and put on a lifejacket or non-slip footwear.

There is also a timely warning about ensuring you always use the current edition of your chart, and I hope it goes without saying that all charts should be corrected properly.

We then move on to communications, and the guidance given by our Maritime Advisory Board is useful for all seafarers. Closed-loop communications are vital to ensure your colleagues always understand exactly what you mean and grunting at people is never a good idea. It is worth quoting again from the final report in this edition: ‘the engine room have a need to know how approaches and departures are progressing’.

UNTIL NEXT TIME, BE SAFE!
REPORTS …

Fishermen and leisure craft – lifejackets

OUTLINE: Two reports highlighting the dangers of not wearing a lifejacket.

What the Reporter told us (1):
I have read with interest and concern that casualties involving fishermen not wearing lifejackets continue to occur with an alarming frequency. This is despite a number of regulatory authorities and charitable organisations raising continued awareness of the risks and resulting fatalities amongst fishermen.

Recently, I observed a local fisherman clearly demonstrating an example of what is wrong with the fishing industry. I attach photographs which help best explain my concern for his safety.

In this case the fisherman returned to port safely, but it is sad to see that, despite the efforts to warn fishermen, there is still such a low level of personal safety awareness, not least in working without a lifejacket.

What the Reporter told us (2):
I observed a small boat used for angling, and it appears that they may have run out of fuel, or perhaps the fuel was contaminated. Either way, the boat was less than five cables from the entrance of the harbour they had just left. I watched as they drifted along the coast in order to make sure that they did not get into further trouble. Neither of the boat’s occupants appeared to be wearing personal flotation devices, even though one of them was standing on the outboard stern platform!

A small fishing vessel – the sole occupant is not wearing any floatation aid.

A small leisure vessel used for angling – no lifejackets being worn.

As a basic precaution before departing for sea, check your fuel quantity and if you haven’t used the engine for a long time, check the fuel quality for diesel bugs or water. Wear a life jacket and lifeline when working near the side and preferably at all times in a small boat. It may also be prudent to drop anchor until the engine is working again. In this case the depth of water was not deep.

CHIRP Comment

The Maritime Advisory Board discussed these reports and commented that the main issue is not the activity that the fishermen were engaged in, but rather the problems that could arise if any of the occupants fell overboard. All fishermen should take their personal safety into account by conducting a (dynamic) risk assessment into the possibility of falling overboard. By “dynamic” we mean, if necessary, think about the logical steps that are required to complete an unexpected task and the associated dangers that may arise and take the time to mitigate the risk. In cases like this, working outside the gunwales / bulwarks of the vessel, IT IS YOUR LIFE AT RISK! The risk assessment might include the following:

• With the particular activity that you are engaged in, what could go wrong, and equally importantly what are you going to do if something does go wrong?
• If you fall overboard, how do you get back on board? For instance, does the boat have external grab lines or a rope ladder to aid boarding?
• In the event that you do fall overboard, a Personal Location Beacon (PLB) will increase your chance of a rapid rescue. These are small, have a battery life of approximately 24 hours, and should be registered with
**RNLI – Cold Water Shock**

A Personal Floatation Device (PFD) is an absolute must for all personnel involved in maritime leisure activities, and in the commercial fishing sector. PFD’s can be “constant wear” and must be worn outside any other clothing such as waterproofs. They do not obstruct any activity.

- Consider wearing buoyant clothing – depending upon the activity, several types of buoyant clothing are available.
- For single-handed operations, who knows where you are and what time you are expected to return?

**TAKE NOTE:** If you do fall overboard then there is an immediate risk of cold shock – this is the immediate response of the body to a sudden unexpected immersion in water where the temperature is 15°C or less. The effect is short term, but the immediate response is gasping so instead of taking in air, water might be inhaled. In addition, the cold water immediately reduces circulation which can induce heart failure even in healthy persons. All of the foregoing affect your ability to swim back to safety and also affect your physical ability to pull yourself out of the water to save yourself. Remember, the longer you are in the water the weaker you will become. Therefore, a lifejacket is essential in order to allow this short-term response of the body to a sudden unexpected immersion in water where the temperature is 15°C or less. The effect is short term, but the immediate response is gasping so instead of taking in air, water might be inhaled. In addition, the cold water immediately reduces circulation which can induce heart failure even in healthy persons. All of the foregoing affect your ability to swim back to safety and also affect your physical ability to pull yourself out of the water to save yourself. Remember, the longer you are in the water the weaker you will become. Therefore, a lifejacket is essential in order to allow this short-term response to pass and to increase your chance of survival. The following link has more information.

**RNLI – Yacht sailing and motor boats**

With respect to the reporters’ comments related to fuel, it is agreed that fuel quantity should be checked prior to departure. As reported, it seems to be quite incongruous that one would run out of fuel so soon after departure.

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**Unsafe pilot boarding and disembarking arrangements**

**OUTLINE:** A report outlining an appalling disregard for safety, where a pilot’s life was placed in danger due to an entirely unnecessary risk.

**What the reporter told us:**

On the evening of 17th April, the vessel in question asked for a pilot for an outbound manoeuvre. The weather conditions were good. The vessel was requested to rig a pilot ladder on the offshore side along with other requirements relating to the tug and unmooring procedures. The master confirmed that the ship was in all respects fit to sail. The pilot arranged to board the vessel from a boat shortly afterwards. As the pilot was boarding, he placed his weight on the ladder and the ladder slipped down about a rung’s length. He then tested the ladder once more and it held, and so he continued to board. When the pilot got to deck level, he saw that an officer (of approximately two metres in height and 140 kilograms in weight) was holding the ladder against the edge of the deck to prevent the ladder from falling down. Essentially, the officer was securing the ladder by using his body weight because the ladder had not been secured to any point at all! Upon arrival on the bridge, the pilot immediately reported the situation to the master and received an apology. Upon completion of the pilotage, the pilot prepared to disembark. However, once again, the ladder had not been made fast and there was just one rung “hooked” into a piece of angle-iron welded on the deck. The pilot again complained that the ladder was not made fast but one of the crew members jumped on the ladder to show him that it was safe enough! As the vessel was outbound and there was other traffic waiting for pilot service, the pilot chose to disembark and there was no further incident.

**What the company told us:**

**CHIRP** wrote to the relevant company who responded and thanked **CHIRP** Maritime for bringing this to their attention. The following points are a précis of the company response;

- Unforgivable negligence of the crew who checked the securing of the ladder.
- It was reported that the ladder was fastened at one point to the deck, but this cannot be followed up with any degree of certainty.
- It is the first time that a case such as this has happened within our fleet.
- In view of the report we will take all necessary steps to prevent a recurrence.

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**MCA - Fisherman’s Safety Guide**

The following resources give additional valuable information to both leisure and commercial fishermen and expand upon some of the comments above. Reading and acting upon the contents is highly recommended in order to ensure your own safety, so that you return to your loved ones and do not become another unwanted statistic.

**RNLI - Commercial Fishing**

**MSN 1851(F) Code of Practice for the safety of small fishing vessels (less than 15m)**

**MCA – Small craft codes**
CHIRP Comment

The Maritime Advisory Board thanked the company for responding to this incident report and agreed with the company that this practice is simply unacceptable. Irrespective of whether the ladder was fastened at one point to the deck or not at all, it was not correctly rigged nor checked to ensure that it was safe for boarding/disembarkation. CHIRP has plenty of reports where ladders have not been correctly rigged at deck level, and some of these have been highlighted on our Facebook (https://en-gb.facebook.com/Chirpmaritime/) page. The use of shackles, spreaders, and angle-iron bars or similar are all illegal methods of securing a ladder. The ladder should have the loose ends of the side ropes secured (lashed) to eye bolts or deck pads and this should be at a distance from the ship side railings – not less than 915mm – so as not to obstruct the deck at the pilot embarkation position.

CHIRP once again reinforces the point that no pilot should ever feel that he is being forced into embarkation or disembarkation via a ladder that is believed to be unsafe. We make no apology for repeating this and encourage all pilots to report any unsatisfactory arrangements to port authorities and Port State Control regimes who should actively support their pilots in this respect.

Yacht safety

OUTLINE: A report outlining poor safety standards on large motor yachts

What the Reporter told us:
Whilst berthed alongside in Costa Rica, a yacht arrived on the berth behind ours. We then witnessed an all too familiar sight, common in the yachting sector. Crew members were repeatedly seen accessing the bow of the yacht when washing down – in doing so, they exposed themselves to considerable risk. Initially it was clear that the crew were not wearing any safety harnesses when working at height and outboard of any rails, even though they risked falling on to a concrete dock or into the sea. In addition, it was noted that the crew were all barefoot, and that they were working on an inclined brow that was covered in soap. Later it was learned that one of the crew members working on the same deck was actually the captain. Time and time again these incidents are being observed in yacht marinas, but it is hard to decide what to do, because gaining the crew’s attention may cause them to fall.

Risk assessments and safe operating procedures must not only be in place but must be adhered to and policed by senior officers. Less experienced crew, or crew carrying out tasks temporarily in other departments will not have the same risk awareness and aversion when carrying out routine tasks. Quite obvious hazards are often overlooked by crew when they are concentrating on a task. Ultimately, the safety culture on board dictates everybody’s approach to every task, no matter how routine it may seem.

Two examples of washing down and placing yourself in danger.

CHIRP Comment

Having discussed this report, the Maritime Advisory Board agreed with the assessment of the reporter and in addition highlighted the importance of considering your personal safety. Whether yachts are large or small, whether they are operated as a charter for hire or crewed for an independent owner, these vessels require a consistent approach to managing safety on board. We recognise the aesthetics involved in maintaining these vessels and of course, decks regularly need washing down, but it is how these tasks are managed that is the important factor. The captain or skipper has a duty of care for all of his crew, and the crew themselves have a duty of looking after their own safety. It is suggested after looking at the two accompanying photographs, that a personal risk assessment could identify the following precautions to be considered when washing down:

- Use of non-slip footwear is recommended as opposed to working barefoot or wearing flip flops on a slippery soapy surface.
Consider a waist belt harness when accessing areas where there is the potential to fall.
Use of longer-handled tools and standing behind a rail is a simple and effective method to ensure your safety when accessing areas identified as potentially hazardous.
In certain circumstances (but not always), a personal floatation device (PFD) may be helpful.
Although both of these photographs were taken within a port, the timing and location of conducting such work should always be considered.
There may be other aspects which are specifically applicable to your vessel. At an on-board safety meeting or even at a coffee break why not sit down, examine the photos, and see how you can make improvements to ensure your own safety and avoid placing yourselves in the same sort of danger as highlighted in the pictures?
We should also mention that there may be an element of duress involved which prevents people taking obvious and simple safety precautions. If you feel that the task you are being asked to undertake is inherently unsafe – DON’T DO IT.

REMEMBER – It is YOUR health and YOUR life at risk.

CHIRP Maritime would be interested in hearing from others with similar experiences relating to safety in general, in order to widen the debate and learn more safety lessons.

Bridge Resource Management (BRM) – misunderstandings and protocols

OUTLINE: Two simple reports describing various BRM failings.

What the reporter told us (1):
After boarding this vessel, and conducting a comprehensive Master/Pilot information exchange, which included adjusting speeds during different parts of the pilotage, the pilot asked the master if engine revolutions could be increased to achieve a desired speed of 14.5 knots. The master replied “Yes”. The pilot then asked whether any notice was required to reduce RPM to manoeuvring speed, and the response was that no such notice was required. On this basis, the pilot asked the master to commence increasing RPM, which the master did.

After increasing the RPM, the master then advised the pilot, “Please give me 10 minutes notice to reduce RPM to manoeuvring speed”, to which the pilot responded, “Please take this as 10 minutes notice to reduce RPM starting from now”.

In a channel transit that takes 35 minutes, it is not operationally practical to give 10 minutes notice for RPM adjustment. The maximum practical time is 5 minutes with the caveat that in case of an emergency there will be NO notice given.

In this case, even though a robust master/pilot exchange was conducted and apparently agreed, the pilot and the master were obviously not on the same page.

What the reporter told us (2):
Just as the vessel was entering a channel where the under-keel clearance was only 1.3m, the master advised me that he was going to his cabin to carry out paperwork, and the chief officer would be on the bridge. I advised the master that we were entering the narrowest and shallowest part of the passage and that he must remain on the bridge. He agreed to this. The master was friendly and cooperative throughout.

The Maritime Advisory Board commented that these reports highlight both communication and standard operational procedure misunderstandings or failings.

Relating to the first report, there was quite a lot of discussion about the apparent misunderstanding between the pilot and the master. Perhaps with today’s modern engines that have “run up” and “slow down” programmes, the master thought that there was no delay, but it would still take 10 or 20 minutes to achieve full speed or manoeuvring revolutions. In addition, there could have been a language barrier between the master and pilot where English was not their native tongue or first language. Whilst it is fully accepted that 10 minutes notice is a standard terminology for increasing and reducing main engine revolutions, does the modern load up / load down programme of an engine take this into account, or should we be asking “How long will it take to speed up / slow down to xxx knots?”

With respect to the second report, the standard operating procedures of a company should dictate that the master is not allowed to leave the bridge during critical sections of a passage, including critical pilotage areas. It is also important to highlight that the master should be well-rested at these times. It is disappointing that paperwork and administration is considered to have a higher priority than navigational safety. Personnel requirements at particular stages of a pilotage could form an integral part of the Master / Pilot Information Exchange.

Communications issues

OUTLINE: Two reports outlining a potential for misunderstanding through a lack of closed loop reporting and vague instructions.

What the reporter told us (1):
This report concerns a failure to maintain closed loop communications, vague and open-ended instructions, and failure to comply with company regulations regarding usage of terms and language for standard procedures.

Whilst the vessel was preparing for sea, the master called the engine control room (ECR) from the bridge with an abrupt command, “ECR, start-up”, before closing the intercom.

www.chirpmaritime.org

The Maritime Advisory Board reviews these reports and shares their guidance on safety lessons learned through this publication.
When the master was challenged as to the nature of the instruction, the derisive tone of his reply was not conducive to a modern workplace. When giving the bridge confirmation that the engine was ready for sea, the chief engineer was continually met with monosyllabic answers before the communication was abruptly terminated. In such situations, the standard communications protocol would be to call the ECR, request a specific engine and thrust configuration, which would then in turn be repeated back, thus closing the communications loop.

Later during start up, permission was requested to clutch in the main propulsion plant. The standard operating procedure, according to fleet manuals, would be to briefly stop the cargo operations until it was ascertained that the clutch and pitch system was not causing uncontrolled movement of the vessel. However, once again, the request to clutch in was met with an abrupt “Yes” from the Master before hanging up, even though the CCTV showed cargo operations were in fact continuing.

Further Dialogue:
Having checked that there was no conflict of personalities involved, it was confirmed that the motivation for the report was the strong possibility that a human error related incident would result from this kind of working behaviour. CHIRP wrote to the DPA who discussed this issue internally and responded. The report was acknowledged and followed up internally as per company procedures.

What the reporter told us (2):
I am reporting an incident where the main engine failed whilst going astern at a critical part of the passage. At the time, we were inbound approaching a turning circle prior to berthing. The engine failed to respond to the telegraph order and several bridge alarms were going off. The master and the bridge team gathered around the telegraph, talking to the chief engineer on the telephone. After approximately 2 minutes, the engine finally started going astern.

At that point, the tugs were not connected and the aft tug reported that they had “no crew” (it was Sunday after lunch…), although there was a strong north westerly wind working in our favour.

No pre-arrival engine test was recorded in the bridge or engine logbooks and the second mate was blamed because he had only recently joined the vessel.

CHIRP Comment
Both of these reports reinforce the importance of teamwork, and closed loop reporting in all forms of communication, in order to ensure that messages are correctly understood.

In our opinion, a properly trained bridge team would not all gather around the telegraph and telephone but would respond to the potential threats by assuming individual functions such as: acknowledging the alarms; have one person checking the situation with the engine room; conducting a navigational check such as the possibility of anchoring and ensuring crew awareness, essentially mitigating the danger by supporting the master and preparing for an emergency scenario. The team would then continue to monitor unfolding events and assess and adjust their plans accordingly. These scenarios should all be practiced in table top emergency drills.

The fact that the engine was not tested at pre-arrival is testament to a company failing in its safety culture - as is the blaming of the second mate. The old expression “Say what you do, do what you say… And then record it!” is particularly relevant here, and blaming an individual is not going to help. What is actually required is discussing what went wrong, then using the lessons learned to ensure that there will be no repetition in the future.

Closed loop communication should be used in all aspects of our work and this is not limited to communications between the engine room and bridge - it applies equally to tool box talks, safety briefings, and all instructions. This is particularly relevant where the language being spoken is not the first language of either or any of the personnel involved.

CHIRP also notes that it is important to keep communications open at all stages of the voyage. Reports have been received where there is a distinct lack of communication between the bridge and the engine room particularly when under “stand-by” conditions. Sometimes, there is absolutely no communication between “Stand By Engines” and “Full Away on Sea Passage” or vice versa. CHIRP believes that, apart from common courtesy, the engine room have a need to know how approaches and departures from berths are progressing. As an example, why should the engine room be surprised if standby generators start up, when a simple communication would have informed them that deck lights had been switched on, bow thrusters were about to be used, or mooring machinery was about to be activated?

Expired charts
OUTLINE: A report detailing the sale by a ship chandler of charts which had been superseded.

What the Reporter told us:
As a yachtsman who uses waterproof charts, I have become aware of ship chandlers selling out of date charts. At two marina chandleries in xx today, I discovered they were both selling an out of date chart some three years old, when the current chart is dated November 2017. This has happened time and time again with these chandleries with several different charts. I have spoken many times about this to the chandlers concerned and to the chart company. The chart company says that they inform chandlers of new chart issues and back old stock so that the chandlers do not lose money. Apart from the consumer law considerations of selling out of date stock, there is the important maritime safety aspect of people buying what they think is a ‘new’ chart when in fact the chart information is not current.

Further dialogue:
Having discussed the report with the reporter the following is a précis of the dialogue with CHIRP:

There is no point in contacting the chandlers, I’ve tried
Identity of the reporter is always protected and all information about a reporter is destroyed on completion of every report.

it and the chart company has tried it. Occasionally there is a vague response from the chandlers, but the situation soon slips back to what it was before. To be fair to the chart company they are as concerned as I am, perhaps even more so because their good name is associated with this bad practice over which they have little or no control. The chart company advised me that they inform their outlets of new charts and encourage the outlets to send back the old stock of charts for a refund. Short of visiting each outlet and physically confiscating the old stock, there isn’t much more they can do, although a stern letter from the head of the chart company to the heads of all outlets (I’m sure that the two chandlers I have encountered aren’t the only ones) might have some effect.

Every so often, the chart company publishes corrections for each of its charts – this is done via the chart company website. They also have a printing history list of current charts. The chart company only issue corrections for current charts, so it is not possible to keep an old chart up to date, (otherwise nobody would buy a new one!).

Before retirement I was an airline pilot and am crucially aware of the perils of using out of date charts and almanacs - at sea and in the air the practice can kill. I am probably a bit of a geek (but hopefully not alone) in buying only what I know to be the current charts and then applying the corrections. However, there are other users, whilst not being deliberately foolhardy, who assume that buying a chart from a chandler will automatically ensure that they are getting the most up to date version. In the case of the two chandlers I mentioned and the out of date chart in question, the issue on sale was the May 2015 version, (and now not correctable), whereas the current one is November 2017. I was offered the older version in May 2018, so chandlers had plenty of time to withdraw the old stock and order the new.

Unless sailors (leisure, fishing and small commercial) actually check online to confirm the validity of what they are buying, they are erroneously trusting the chandlers to do the right thing and sell them the latest edition. Caveat emptor should not apply to safety. Are chart purchasers all aware of the availability of corrections?

Best practice

CHIRP regularly receives correspondence from the Training Managers of companies highlighting ideas and best practice which have been implemented in their fleets. We are pleased to reproduce a selection of the ideas that have been received.

Any safety chains or openings in handrails should be secured at all times when not in use. This ship has highlighted the safety chains and has reminded users to secure the openings after use.

The garbage area on this ship is now highlighted, and they have fitted a small canopy above the drums so that the area is protected from rain and any soot from the funnel. In addition, they have placed additional waste bins in each cabin and public room specifically for plastic, in order to aid segregation.

Who hasn’t seen lifebuoy lines get into a tangle which would cause problems if the lifebuoy needed to be rapidly deployed? Here is a simple solution where the rope is coiled in a container and "stored" ready for immediate release.

CHIRP Comment

The Maritime Advisory Board agreed with the sentiments of the reporter and noted that the obvious lesson to be learned from the report is to ensure that when purchasing electronic or paper charts, that they are indeed the latest edition. The vast majority of chart suppliers have websites where the latest editions and corrections of their products can be checked.

The Board also noted that counterfeit charts and counterfeit software have become increasingly prevalent. The following link, although only applicable to British Admiralty charts, may be helpful in raising awareness of the issue.

British Admiralty – Guide to identifying counterfeit charts
(https://www.admiralty.co.uk/AdmiraltyDownloadMedia/A-Guide-to-Identifying-Counterfeit-ADMIRALTY-Products.pdf)
Our aim is to relay safety messages in order to improve safety at sea, to help reduce the number of seafarers who are killed or injured at work.

Simple solutions do not have to be expensive or time consuming in order to be effective as in the examples shown. Overall, the ideas stem from a positive safety culture, good situational awareness, and a healthy respect for housekeeping issues.

**IS THE STANDARD THIS HIGH ON BOARD YOUR SHIP? IF NOT THEN WHY NOT, AND WHAT ARE YOU GOING TO DO ABOUT IT?**

-- REPORT ENDS --

We are grateful to the sponsors of the **CHIRP Maritime** programme. They are:

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![Lloyd’s Register Foundation](image8)
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![Witherbys](image10)

Regular readers will be aware that **CHIRP** Maritime has developed a Reference Library which contains links to a comprehensive list of incident investigations, near miss reports and safety alerts issued by a selection of government maritime agencies and shipping industry sources around the world. The link to this library is highlighted below.

**Reference Library Index**

The library has been written in Microsoft Excel on a Windows 10 operating system – the browser used for links was Google Chrome. With these in place, all links should open automatically. It has been found that when viewing the files on an Apple Macintosh, that links to the internet tend to open correctly, but links to a specific PDF file do not open. If this is the case, then copy and paste the link into your browser – the requested file should then open.

We should emphasise that that the official source of information is the actual web sites of the Agencies included in the workbook. The links to these sites may be found at the top of each sheet of the workbook, and should be consulted for the most current data.

It is intended to update the library on a monthly basis – any suggestions for further enhancements of the library will be very much welcomed.

The library was last updated August 2018.