MARINE **CLAIMS TRENDS**

The frequency of major hull claims remains low, yet natural catastrophes and fires have resulted in some large hull and cargo losses in recent years. Attritional claims, while stable in terms of frequency, are becoming more material. Meanwhile, larger ships and concentrations of cargo risks create the potential for ever-larger losses.



UPTICK IN NATURAL CATASTROPHE ACTIVITY

Hurricanes Harvey, Irma and Maria (HIM) are among the biggest marine loss events of the past five years and would feature highly among the top 10 marine losses of the past decade. The three storms in 2017 caused an estimated US\$1bn of insured losses for the yacht market alone, as well as causing extensive damage to ports, cargo and inland marine risks, such as warehouses, buildings under construction and weather stations.

Natural catastrophes continued to generate losses for marine insurers in 2018 – Hurricane Florence caused damage and disruption to several ports on the US east coast in September. On the other side of the world, Typhoon Mangkhut caused damage to coastal infrastructure, shipping containers and yachts in Hong Kong and China, while an offshore engineering vessel Hai Yang Shi You ran aground near Hainan. Typhoon Jebi, the most powerful storm to hit Japan in 25 years, caused a tanker **Houn Maru** to break its mooring and collide with a bridge linking Kansai International Airport to the mainland.

"Natural catastrophes are the exposure of most concern from a severity viewpoint," says Duncan Southcott, Marine Claims Specialist at AGCS. With growing concentrations of insured assets in catastrophe-exposed regions, storms, floods and earthquakes have the potential to generate very large and complex claims for marine insurers."

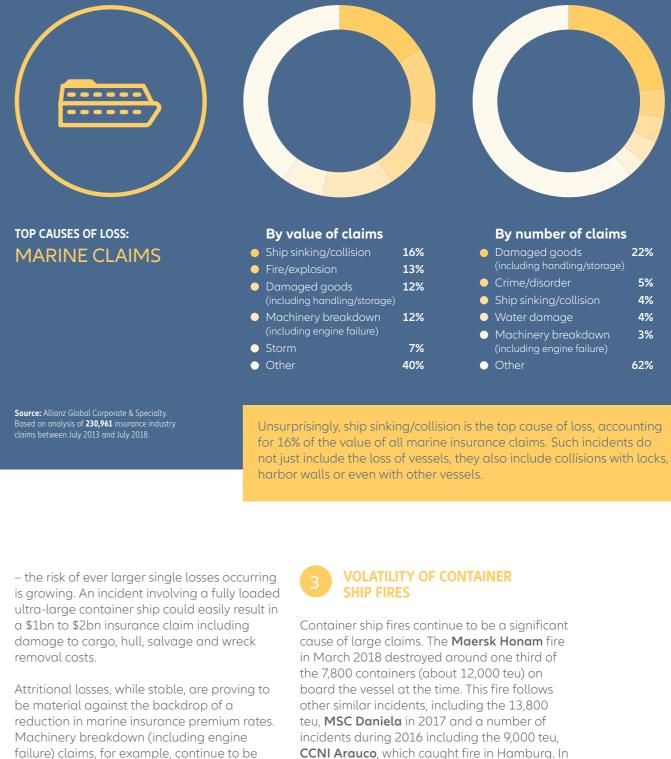
HULL ACTIVITY AND MORE **ATTRITIONAL CLAIMS**

Benign hull claims activity remains a positive for the marine sector, with relatively few major losses in recent years. The grounding of the Costa Concordia in 2012, which resulted in a US\$2bn loss, remains the largest loss of the past decade. Yet there have been some other notable, more recent incidents, such as the fire and sinking of the oil tanker **Sanchi** off the coast of China in January 2018.

Despite improvements in shipping safety and technology, collisions and groundings continue to cause claims, while the structural integrity of large vessels can be a cause for concern. Cargo liquefaction, the abrupt transformation of solid materials like iron ore and nickel ore ore into an almost fluid state, remains an issue for bulk carriers, Liquefaction is thought to be behind the loss of a number of vessels, such as the Emerald Star in 2017 and the Bulk Jupiter in 2015.

The increasing size of vessels and accumulations of cargo risk means that severity of very large losses continues to be a significant driver of hull claims. Data from the Nordic Association of Marine Insurers (Cefor) shows that the most costly 1% of all claims account for at least 30% of the value of total claims in any given year.

With larger and more sophisticated vessels entering the sector – and more risky trading areas such as polar waters being explored



CCNI Arauco, which caught fire in Hamburg. In 2012 a fire on board the German container ship MSC Flaminia forced the crew to abandon ship in the middle of the Atlantic Ocean.

Container ship fires are difficult to extinguish and typically lead to large complex insurance claims. The **Maersk Honam** fire took over a month to put out and several more months before the vessel was able to be taken to a port of refuge and the cargo discharged. The

among the largest causes of loss by value and

frequency. In June 2018, the US Coast Guard¹

warned that fuel contamination at the Port of

Houston was causing engine problems - the

problem has since spread to other regions as

far apart as Singapore and Panama – and is

thought to have affected some 200 vessels.

Claims arising from contaminated fuel raise

is liable for damage.

difficult questions around causation and who

ision	16%
	13%
	12%
g/storage)	
kdown	12%
failure)	
	7%
	40%

	By number of claims	
•	Damaged goods (including handling/storage)	22%
•	Crime/disorder	5%
\bullet	Ship sinking/collision	4%
\bullet	Water damage	4%
•	Machinery breakdown (including engine failure)	3%
•	Other	62%



loss has been predicted to result in the largest ever general average claim, which can take years to settle due to the large number of insured parties and complexities around causation and subrogation.

Such complex losses can also lead to disputes. Establishing the cause and responsibility for a loss is challenging, while some fires are caused by mis-declared or wrongly-stowed cargo. The MSC Flaminia loss, for example, sparked lengthy litigation as the various parties contested causation, fault and damage to the cargo and vessel.

"Container ship fires are a potentially growing volatile source of claims as ships become larger and carry more and more cargo. If action is not taken to tackle this issue, fires on board container ships will continue and they will become larger and more costly," says Southcott.



The past five years have witnessed a notable increase in cargo claims. Both the frequency and severity of cargo claims has been increasing, with a combination of large losses and natural catastrophe activity. The past year, for example, has seen two large warehouse fire claims in the range of \$50mn to \$100mn, as well as a number of cargo losses from HIM during 2017.

Of particular concern is the increasing risk of a large loss event due to increasing value accumulations at ports, warehouses and vessels. The fire and explosion at the Chinese port of Tianjin in 2015, Superstorm Sandy in 2012 and the Tohoku earthquake in 2011 all brought large cargo losses.

The automotive sector remains a significant source of exposure and claims, with large numbers of vehicles stored at ports exposed to hail, storms and flooding, as well as fire and explosion. Car carriers are also a concern

following a spate of losses involving stability and fires. The pharmaceutical sector is another sector where carao claims have increased. with the theft of high value shipments and damage to temperature-sensitive cargo.

Cargo misappropriation is a growing issue. High value cargoes, such as commodities like oil and iron ore, can be either stolen or illegally sold. It is a global issue, where risks need to be assessed and monitored carefully to spot such issues arising early before they become very large claims.

"The cargo market has experienced a number of large claims, but there is simply not enough premium to pay for catastrophic or unusually large losses," says Southcott. "We are seeing much greater claims volatility with the higher accumulation values of cargo on larger ships and in warehouses."

CONNECTED TECHNOLOGY IMPACT AND NEW LOSS DRIVERS

The growing use of connected technology in the maritime sector is expected to be a positive for both safety and marine insurance claims. Electronic navigation tools, ship-toshore communications and the greater use of sensors should improve navigation and help avoid groundings and collisions. The growing prevalence of sensors could also reduce machinery claims through performance monitoring and early intervention. Tracking and sensor technology also has the potential to mitigate cargo losses.

Technology will also have downsides, most notably cyber security risks from increasing reliance on IT systems and networks. The WannaCry and NotPetya malware attacks of 2017, which also had an impact on the maritime sector, show the potential for large losses, says Southcott. "With the move towards greater automation of shipping and cargo handling, cyber will become a feature of marine claims going forward. The big unknown is so-called 'silent' cyber exposures in many marine insurance policies."

"The issue of over-reliance on technology among seafarers is ongoing and we still see a number of incidents where officers and crew have relied too much on technology," adds Captain Rahul Khanna, Global Head of Marine Risk Consulting, AGCS. "Sometimes replacing common sense decisions with digital inferences is not such a good idea. Crew and officers have an increased responsibility to understand the shortcomings and limitations of technology. The human interface with technology will be an important consideration in future safety."

While improved risk management and technology should reduce claims activity, other loss drivers are likely to emerge. For example, political risks and climate change could see ships traversing more hazardous routes, such as polar waters. Climate change concerns and environmental regulations could create new liabilities for shipping companies. Meanwhile, attempts to reduce emissions could be accompanied by technical issues with engines and bunkering of biofuels, as well as encouraging even larger vessels.

"Increasingly, we are running claims scenariotesting and share the claims experience with clients to help them understand what to expect in the event of a claim. This also builds relationships in advance of a claim, establishing trust and co-operation before a loss occurs."

CO-OPERATION AND CLAIMS SCENARIO-TESTING INCREASINGLY **IMPORTANT**

Successful claims resolution is all about communication and co-operation. "If all parties exchange information and work towards finding a solution it can speed up the claims process. It is a two-way street, and insurers need to inform clients of their role, coverage and proceedings," says Southcott.