
AN ALTERNATE HISTORY GAME OF AIR FLEET BATTLES

# LEVIATHANS GAZETTEER

# CONTENTS

# INTRODUCTION

Welcome to *Leviathans*, an alternate history/steampunk setting where massive naval ships have taken to the skies and the world empires of 1910 race to expand and advance their fleets while staving off foreign spies, air raids and the potential for all-out war!

The *Leviathans Gazetteer* is presented as a British Naval document that will quickly immerse you in this dynamic universe. It begins with an in-depth discussion of the development of leviathan technology and provides specifics on how the great ships manage to fly; followed by a collection of eight short treatises on the most significant empires, starting with the British and including the French, Japanese, Germans, Russians, Italians, Americans and Austro-Hungarians. A Minor Air Powers section details a handful of upstarts, while the Flash Points section describes the most current hot spots of conflict around the globe.

## DEFINING LEVIATHANS

In this box set the word "Leviathan" has four different uses.

- *Leviathans* (in italics) refers to the game/universe as a whole.
- When formatted as leviathans or leviathan (no italics and lowercase) it refers to all air ships, regardless of size or class (depending upon the "in-universe" point-of-view, this might be shortened to "lev").
- HML *Leviathan* ("HML" plus italics) is the name of a unique vessel.
- *Leviathan* (in italics, but no "s") refers to a class of ship, usually referred to as "*Leviathan*-class."

Almost without exception, in this and other sourcebook treatises the use of "leviathans" refers to all air ships, while the use of "Leviathans" in the rulebooks will refer to the game/universe.

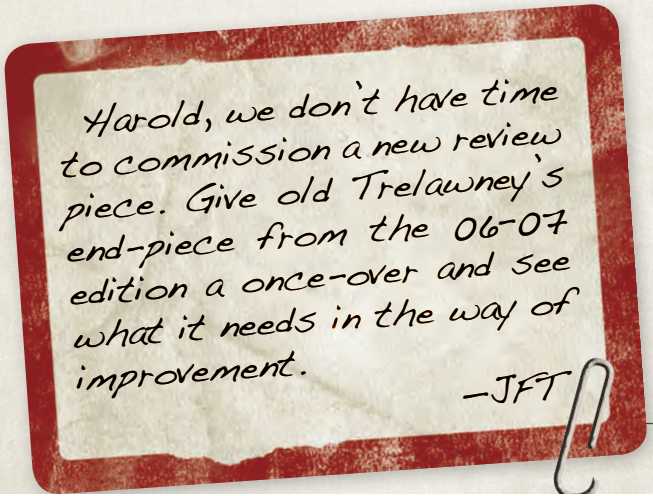
# TECHNOLOGY

As we all know, the electrical fluid—electroid—was discovered first by the obscure Polish genius Rychnowski just over twenty-five years ago, in 1878. Unfortunately, the paucity of electrical current available to Rychnowski meant that he was able to produce only small quantities of the fluid; as a result, Rychnowski concentrated instead on finding a way to reverse the process of production. He sought the mythical "electrical explosive," or "*eteroid* bomb" (*eteroid* being the original nomenclature used to describe this miraculous substance) that perennially is the subject of so much ill-informed speculation and rumour-mongering.

The obscurity of its discoverer did not prevent details of the process by which electroid can be isolated from circulating throughout Europe over the next decade. Without access to significant amounts of raw electrical current, only the smallest quantities of electroid could be generated by any one person. Nonetheless, scientists (and crackpots) of the continent dabbled in the isolation of electroid, and their limited successes helped identify some of its basic properties.

In its pure form, electroid resembles a partially opaque liquid less dense than water and cool to the touch regardless of external temperatures. Electroid does not partake of any chemical reactions—it does not combust, dissolve, form solutes, oxidise, reduce or erode. Left to its own devices, electroid appears to 'evaporate'—although 'sublimate' might be more accurate; electroid does not move from a liquid to a vapor state, instead reverting from fluid to current through a gradual process of atmospheric discharge. Only containers made from electrically conductive materials—flasks made wholly of metal, or surrounded by a wire mesh cage of the type developed by Sir Michael Faraday—can contain electroid over long periods, and (under normal circumstances) will do so indefinitely. If exposed to high voltage currents, however, there is a distinct likelihood that it will spontaneously revert to electrical current rapidly in a self-catalysing reaction, such an event known to electrical flyers as a "flashover."

Electroid would have remained an academic curiosity, of interest only to a few, had it not been for the inexorable drive of Captain Fisher, the work of the Royal Academy, and the secretive "E Committee" chaired by Lord Kelvin. Once the government became aware that European powers were sponsoring investigations into the properties and



# GREATER BRITAIN EXHIBITION

The Battle of Tsushima-where the Russian leviathan *Berkuts* defeated the massive guns of the Japanese wet navy-heralded the acceptance by the world's empires of these "aether flyers" as a technology worth investigating. However, the Greater Britain Exhibition will forever mark the beginning of the public's understanding of the might these ships represent.

In 1890 the French became aware of British work in the field of leviathan technology and changed their own course. After a series of false starts (and fatal accidents), the *Ganymède* was smuggled to Britain in pieces-labeled as railway locomotive parts-and reconstructed inside the French pavilion at the Crystal Palace for the Greater Britain Exhibition in London. At the height of the exhibition, to the amazement of the crowd, the *Ganymède* lifted itself skywards, draped in bunting, belching smoke and carrying beneath it a platform on which two mounted and armored cuirassiers brandished the Tricolore.

The French ambassador challenged Prime Minister Gladstone with, "Eh sir, and what do you say to that?" but the prime minister simply checked his watch, brushed a smut from his sleeve and asked, "Why is yours so infernally dirty?"

Moments later, Her Majesty's Sky Ship *Leviathan*-the first sky vessel of that name-chugged its way across the sky, conspicuously missing colored bunting and horsemen but displaying a pair of 3" cannons mounted on its bow, and a number of Maxim automatic machine-guns.

The Great Sky Race had begun.

various potential uses of electroid, Captain Fisher (now Aide de Camp to Her Majesty Queen Victoria), along with Lord Kelvin, established the E Committee to determine whether this new discovery posed a threat to the Empire or provided opportunities. The combination of the cream of the nation's crop of savants under the leadership of Lord Kelvin, and superior British engineering, enabled the full realisation of electroid's potential.

bit rough on von Siemens and Shukhov, let alone the French?

## PRINCIPLES OF ELECTRICAL FLIGHT

It is now well known that when appropriately modulated high voltages are applied to electroid under controlled conditions, a lifting force is generated. This lifting force depends on a number of highly secret variables, into which this discussion will not venture. However, under the correct circumstances, a quantity of electroid can be induced to generate a lifting force equivalent to many times its own mass—far exceeding the lifting potential of lighter-than-air gases such as hydrogen. While modern science may not be able to fully explain exactly how electroid achieves this ability, modern engineering has proven fully capable of mastering the art of electrical flight, achieving as its pinnacle the modern aerial battleships, known after their first ancestor as leviathans.

Currently, there is no known maximum quantity of lift which electroid can theoretically generate. There are, however, limits to the feats that can be achieved—two practical, and one of convention.

Firstly, lift generated is proportional to the

voltage differential which can be applied to the electroid. Practical problems govern the voltages which can be reliably generated, sustained and contained by the most modern materials in use. Each nation jealously guards details of its potential in this area, but it is apparent that at this stage all parties are capable of much the same achievements.

Secondly, electroid in the agitated state is much more highly sensitive to spontaneous reconversion into electrical current—the aforementioned "flashover"—than in its "ground," or unagitated state. The presence of the current being supplied to the aether vortices is theorised to present a maximum limit to the degree to which electroid can be agitated—sooner or later, the very source of agitation will be sufficient to induce flashover. Containment tanks are usually provided with multiple series of conductive and non-conductive insulating outer layers to protect against ordinary misadventures; while these may well be increased, the additional weight involved will inevitably decrease the net lift produced—and in any event, it is still necessary for the aether vortex and its associated transformer coils and current supply to be proximate to the conductive shell most immediately containing the electroid.

Finally, while the exact heights achievable by leviathans are closely guarded secrets, it is known that some air sailors succumb to deleterious conditions due to the scarcity of breathable air at the vessels' maximum operating height, or "ceiling." This altitude sickness is well understood; it is experienced by mountain climbers, usually at heights exceeding a mile above sea level. Airmen are carefully monitored for symptoms of altitude sickness; the natural sturdiness of the bluff Englishman is, however, a natural antidote to such problems. We cannot expect our Continental competitors to match our yeomen in this area! Nonetheless, the ceiling of current electrical flyers cannot greatly exceed present levels without further research in both power generation and ship construction.

In order to take advantage of the lifting properties of electroid, it is necessary to contain the electroid safely, to affix such containment—together with its controlling apparatus—to a strong frame, and to provide the power and

## TIMELINE

*1878*
Rychnowski isolates the electrical fluid he calls *eteroid* (later called electroid); he does not yet recognize its lifting abilities.

*1880*
Russian spies obtain copies of Rychnowski's notes and samples of both eteroid and the mechanisms by which it could be separated. The tzar commissions Vladimiry Shukov, scientist and polymath, to investigate the material.

*1880–1881*
The First Boer War, also known as the Transvaal War, is a relatively brief conflict in which Boer settlers successfully resist a British attempt to annex the Transvaal, and re-establish an independent republic. This conflict is remarkable for its British to Boer casualty ratio of 10:1.

*1882*
Shukov discovers that eteroid, when agitated by high alternating currents, has lifting properties. The technology of the time, which lacks very high voltages and suitable diamagnetic materials, means initial tests are disappointing and little practical value is seen.

*1883*
Russian scientist Fedor Oblimovsky begins a crash program (ultimately fruitless) to develop an electroid-based explosive shell.

propulsive equipment required to enable such a vessel to perform useful work. Further, with leviathans being at the forefront of martial capabilities, diverse weapons are carried. We shall consider each of these requirements in some detail in the following sections.

The designs of the first electrical flyers owed more to expediency than to measured thought. The HML *Leviathan* (the first electrical flyer of that name) clearly showed that its ancestry lay in locomotive-works; a boiler-like vessel containing several spherical electroid tanks, and the engines and controls in a metal-sided compartment attached to the main tank's underside. France's *Ganymède*, by comparison, drew from the Brazilian Santos-Dumont's experiments with lighter-than air dirigibles, and suspended its steam plant on a platform slung underneath a large, biconic electroid vessel. Leviathan became the standard class name by which all electrical flyers are known because its practical British designers made the utmost of its limited carrying capacity. While the *Ganymède* was laden with engineers in tropical whites and a pair of mounted Guardsmen resplendent in their blue uniforms and gleaming cuirasses, the *Leviathan* → Grimsel Pass? was crewed by schoolboys and commanded by an aerial novice (Fisher)—but carried a pair of quick-firing cannons and a pair of Maxim guns. The comparison—between the French, stuck in the glorious memories of the Napoleonic past, and the British, embracing the new—has rarely been clearer, even to the humblest of observers.

The practical requirements for construction of an electrical flying vessel soon became clear. The main need was for a large, strongly constructed hull that could contain the required engines, propulsive methods, electrical generators, fuel and crew required to lift the vessel. The hull needed to be sufficiently enclosed to provide protection to the interior of the vessel, while allowing for a way to get fuel, supplies and other essentials inside to be carried aloft. It needed to provide stations from which the vessel could be commanded, and (in the case of warships) fought. In short, existing marine architecture provided the perfect starting-off point for the development of electrical vessels.

Any shipwright of the last twenty years would be completely at home in a modern leviathan yard—in fact,

## TIMELINE

**1884**
The Mahdist revolt in the Sudan begins. General Gordon besieged in Khartoum.

**1885**
German Imperial agents bring news of Shukov's work from Russia to Berlin. Ernst Werner von Siemens is put in charge of evaluating the electroid research, and (with better German precision technology) shows how higher voltages produce useful lift. Kaiser Frederick III, overly complacent in part due to memories of Prussia's crushing victory over France in 1870, fails to recognise the military potential of this discovery.

**1886**
French spies obtain von Siemens' work. The French begin a pilot program to produce a flying vessel, the *Ganymède*, spurred on by memories of their balloon losses to anti-aircraft artillery in the Franco-Prussian war. They convince their government to fund the construction of an "Aether Flyer," pointing to the opportunity to bypass England's existing naval superiority by taking to the

most are, as the once-great shipbuilders such as Vickers and Armstrong have moved from sea to sky construction. Leviathans are constructed with a fully iron double hull, with armour belts running amidships protecting the ship's vitals. Two keels provide the structural stability required in a mass of thousands of tons that must lift itself skyward. Next, one electroid tank is attached to a keel. On some smaller, dual-keel vessels, the tanks are so large they attach to both keels. These tanks, buried in the depths of the leviathan's hulls, take up the largest percentage of interior volume, and dictate the arrangement of all other components.

These lifting tanks are supplemented by several—usually four—smaller tanks located at the periphery of the vessel. While the main tanks provide sufficient lift to raise the fully laden vessel, these smaller tanks—known as trim tanks—provide control over attitude and elevation. For example, judicious control of the current supplied to the tanks allow leviathans to rise gracefully on an even keel and descend without any vulgar swooping and inclining, which would make servicing the boilers nigh-impossible.

The trim tanks are vital to the leviathan's role as a vessel of war in two related ways. First, they compensate for the movement of masses inside the vessel, maintaining the leviathan as a stable gunnery platform. Secondly, the introduction of fast-acting, electromechanical controls in 1898—the Swann stabiliser being a typical example thereof—provides a means to absorb a significant quotient of the recoil forces created by firing large turreted weapons. The development of successively refined stabilization controllers has enabled leviathans to carry successively larger guns in turrets mounted on their upper decks—of which more later.

The form, placement and orientation of both main and trim tanks differs between countries, often in very significant ways. For example, the British have wisely chosen to anchor their cylindrical main tanks to the upper keel for strength, with heavier components such as boilers and generators mounted in the lower hull. The trim tanks are spaced as widely as possible along the midline, to the point where they extend from the main hulls themselves. These tanks, conspicuous in their conductive outer armour, are often mistaken for the main lifting tanks. This provides a very

## TIMELINE

skies. Their goal is to reveal the *Ganymède* at the planned Exposition Universelle in Paris, in 1890.

The French term electroid gains common currency, replacing the use of *eteroid* in most of Europe.

***1887***

British agents become aware of the French program to find a use for electroid. Lord Kelvin is appointed to a secret commission charged with producing a counter to whatever the French achieve.

***1888***

The keel of the French *Avion d'Aether Ganymède* is laid. Frequent problems prevent the vessel from taking flight.

***1889***

Kelvin's E Committee perfects the practical lifting properties of electroid or, as the British insist on calling it, "electrical fluid," when energized through the use of aether vortex generators based on Tesla's AC transformer designs. The first electrical fluid flier is built from an old hot-water tank, powered by a bank of galvanic batteries. This lifted a coachman, Tom Ablett (first electrical aeronaut) to a height

stable and airworthy arrangement; the loss of protection is deemed a worthwhile exchange for superior maneuverability and a stable firing platform. French designers, by contrast, affix multiple spherical main tanks to the lower hull. They claim this produces a handier design, one more responsive to helm commands. The Austrians' leviathans owe their characteristic flatiron shape to a combination of high-mounted main tanks with trim tanks deployed low within an extended hull for additional protection.

Beyond the obvious differences dictated by the arrangement of lifting gear, the aforementioned marine architect would notice some subtle and not-so-subtle differences between an electrical vessel and a more familiar naval vessel of the same displacement. Leviathans seem somewhat less fine in their lines compared to ships; however, fineness is less important given the consistency of air compared to that of water. Leviathans are considerably more strongly braced internally than naval vessels, a requirement given the absence of support provided by an aquatic environment. In exchange, leviathans lack the internal partitioning required to divide a sea-going vessel into watertight compartments. Space is always at a premium inside the hull of a leviathan, and accordingly—with the exception of the larger compartments dictated by the need to contain boilers, engines, gearing etcetera—it is often compared to a warren of twisty little passages, all alike in the eye of the innocent beholder. Large hatches and portals exist at the lower levels of the vessel, allowing the vessel's crew and cargo to ingress and egress while landed; gun casemates are wedged into the corners between electroid tanks, and crew quarters often consist of hammocks slung wherever there is space. Officer quarters, by comparison, are located in the upper hullworks, to ensure that the captain and his officers are conveniently placed to access the bridge at any time.

## DEVELOPMENT OF POWER

The *Ganymède* and the *Leviathan*, facing each other above the Crystal Palace in their iconic confrontation of 1890, were highly inefficient by modern standards—grossly underpowered, with weak propulsive systems. Yet the basic source of motive power of the most modern leviathans is in essence the same as that of their ancestor—the steam engine.

## TIMELINE

of 50 feet before the boiler burst at a weakened seam and crashed to the ground. Tom Ablett becomes the first casualty of electric flight.

***1890***

*Ganymède* and *Leviathan* make their first appearances, at the Greater Britain Exhibition in London.

The Great Sky Race begins. Initially all designs use broad-bladed airscrews that resemble oversized ship screws. These worked at relatively low revolutions and performed with low efficiency.

***1891***

Tesla demonstrates his "resonant transformer," an early system for generating high-frequency, high-voltage currents. This provides as much of a leap forward for airship technology as the shift from single-stage to multiple-stage boilers gave seagoing ships, increasing lifting ability-though at a high cost in fuel.

The term *leviathan* becomes common nomenclature to describe any air vessel, regardless of size, class or nationality.

Portsmouth Naval Review: Royal Navy fleet embarrassed by strong

British man has put the power of steam to his uses since the early eighteenth century. As every schoolboy knows, water heated into steam in a boiler is allowed to expand into a cylinder, creating usable power. The exact mechanisms involved have varied—Newcomen's atmospheric engine was succeeded by James Watt's more efficient design—but it was the introduction of high-pressure engines by Richard Trevithick that led to the most significant developments. Steam locomotives, steam-powered tunnelling devices, marine engines—all marked the transition of steam power from an unwieldy giant of limited ability, to a prime mover of universal application.

The steam engine suffered, however, from an almost inexhaustible appetite for coal. This appetite offered few challenges to land-based uses, but proved a near-insurmountable obstacle to marine use of steam engines well into the last century. Naval vessels of the time could only maintain steam power for limited periods, requiring the deployment of full masts and riggings on the steam-powered ironclads of the period. The dubious wisdom of this arrangement was of course demonstrated with the foundering of HMS *Captain* in 1870. Had the lifting powers of electroid been available at this time, the lack of an efficient power source still would have prevented its exploitation.

Fortunately, a solution to this problem presented itself in 1879 with the development of the compound steam engine. It seems a matter of common logic that larger steam engines, using larger cylinders, should produce more power. Unfortunately, harsh reality proves otherwise. The greater expansion of the steam providing motive force in such cylinder results in a cooling of both the steam and the cylinder, which results in loss of power. Accidental discoveries on the Continent produced a solution for this conundrum. By allowing the steam to expand in a series of connected, successive cylinders, it becomes possible to extract more work from the expansion of steam without the crippling losses experienced by increasingly larger cylinders. Initially used in locomotives from around 1880, compound engines were soon transforming maritime propulsion, as compound engines of two, three and even four connected cylinders were developed. By the time the need for an economical, powerful engine for electrical vessels was realised, an engine worthy of the challenge was available.

## TIMELINE

presence of French leviathans accompanying ships.

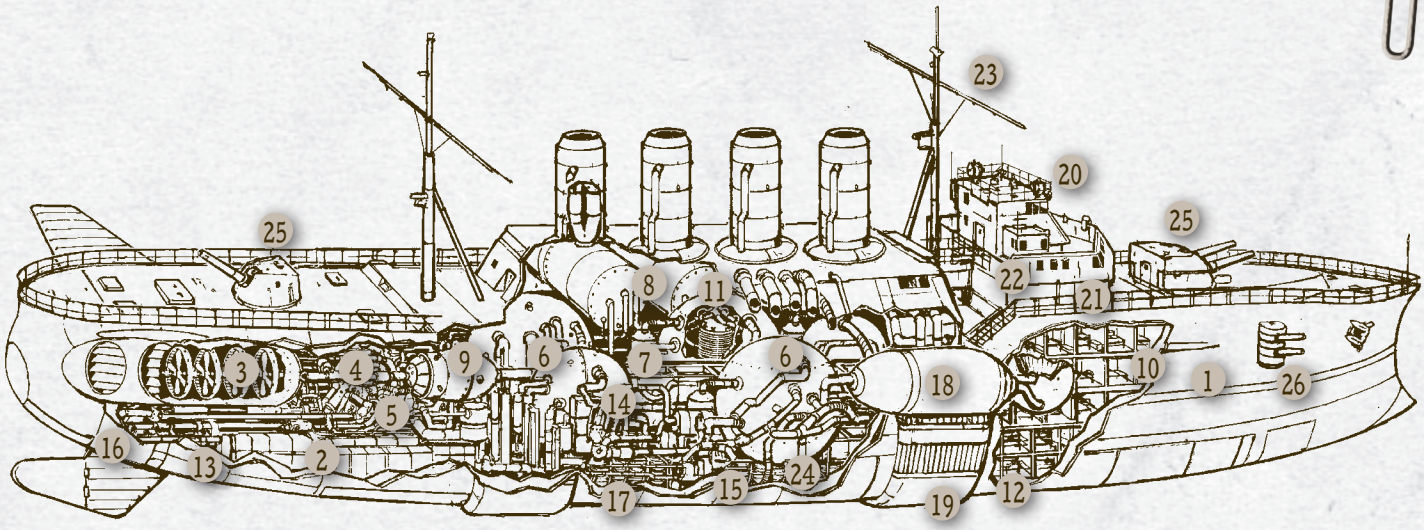
John "Jackie" Fisher appointed Third Sky Lord by Queen Victoria; charged with building a fleet of leviathans "to shame the French."

Von Siemens inspires Kaiser Wilhelm II with the prospect of competing with Britain and France in the skies. German program launched under Admiral Von Tirpitz.

*1891-1894*

The first generation of functional leviathans appears. Limited in size to what would later be termed destroyers and light cruisers, they have armour that is proof from most rifle fire, and acceptable weapons that unfortunately boast only a pitiful range. Despite these limitations, their use in colonial wars enabled French victories in Africa and English victories in Afghanistan. Their use is also controlled by limited production capacity of electroid at elefacturies-dark mills where electrical current is converted into electroid-and constraints on supplies of copper to form electroid tanks.

The airscrew evolves to be longer and leaner. Efficiency improves without increasing vulnerability. Most leviathans are destroyer/light




# THE INNER WORKINGS OF A LEVIATHAN

1. Armoured Double Hull
2. Ship Stores
3. Ducted Screws
4. Engine Shafts
5. Backup Electrical Generator
6. Main Electroid Containment Tanks
7. Main Electrical Generators
8. Boilers
9. Turbines (newer Destroyer Class)
10. Officer's Mess & Quarters
11. Tesla Coil
12. Airman's Quarters
13. Aerial Torpedo Magazine
14. Upper Keel
15. Lower Keel
16. Steering Gear
17. Bunkers
18. Adjustable Electroid Tanks (Trim Tanks)
19. Swan Stabilizers
20. Wheelhouse & Fighting Bridge
21. Captain's Quarters
22. Radiotelegraphy Room
23. Foremast with Main Telegraphy Antenna
24. Bunkers
25. Turreted 6in Guns
26. Casemate-mounted 3in Chase Guns

Modern leviathans are powered by two, three or more compound engines, depending on their displacement and intended maximum velocities. These engines are virtually identical to those found in the hulls of ocean-going merchantmen and remaining naval vessels. National character is often the main source of differentiation in design—Austro-Hungarian vessels tend to rely on a larger quantity of smaller engines than would a British vessel of the same displacement, while the Italians operate their larger engines at pressures at which most sensible British engineers would blanch. In any case, the power produced by these engines is distributed to the propulsive engines which move these great sky vessels, and to the electrical generators which allow the lifting capacity of electroid to be realised.

During most of this time, King Coal has remained the combustible of choice to fuel both marine and aerial vessels. Coal is in many ways an ideal fuel—stable, easily handled, and in most circumstances entirely safe. Coal is also easily available to most nations, and a widespread network of coaling stations serves each nation's ships of sky and sea. In the last decade, however, engineers in England and on the Continent have begun to experiment with the use of mineral oils as a potential alternative. Mineral oils, also known as petroleum, offer a number of potential advantages over coal, chief among them being compactness and ease of handling, both due to its liquid nature. On the other hand, petroleum is intrinsically more flammable than coal, requires complex plumbing arrangements which can easily go wrong in battle, and is also only available in large quantities from a limited number of locations, in the middle and far East. Despite these drawbacks, most navies have constructed or are laying down petroleum-fired destroyer- and light cruiser-class aerial vessels, with a keen eye to observing their characteristics in practical demonstration.

## MEANS OF PROPULSION

As a ship's screws push it through the water, an electrical vessel's airscrews cause it to progress magnificently through the skies. The science of airscrew design has seen many

## TIMELINE

*1891-1894, continued*
cruiser class ships sent to fight poorly armed tribesmen, except for a few prestige "battleships." This situation changes when an early clash between France and Italian leviathans in 1894 ends with both ships crippled by airscrew damage. The Italians recovered their ship, but the French vessel was blown south over the Mediterranean and foundered when it failed to maintain electroid charge.

*1892*
First Russian leviathans, known colloquially as *Berkuts* (Falcons) are raised.

French *Ganys* (French term for leviathans) play a crucial role in the Colonial Landgrab, allowing the French to lock down control of Algeria and Somaliland.

Loss of *Rousseau* on Alsace-Lorraine border raises Franco-German tensions.

*1893*
Italy raises its first leviathan, the *Napoli*.

First American leviathan, USS *Raleigh*, is raised.

German leviathan SMS *Kaiser Friedrich III* crashes during gunnery tests. *Kronprinz* Wilhelm, heir to the German throne, dies in the accident. Heartbroken, Kaiser Wilhelm II cancels German leviathan development.

advances in the last two decades, all of which have been used to full advantage by the high navies of the world.

The first airscrews, those of the *Leviathan* and *Ganymède*, were hastily adapted from ship's screws. However, air and water have completely different properties—water, while seeming to flow smoothly under an idle hand, exerts a considerable viscous force on the hull of any naval ship being forced through it; air poses far less resistance, but also provides far less substance for an airscrew to act on to provide forward movement. The original short, wide blades used in those early aerial vessels constituted one of their greatest failings.

Soon, the blades of airscrews had become longer and narrower compared to their aquatic brethren. These blades supported higher shaft rates, which also improved propulsive efficiency. Soon, airscrew design stabilised, balancing high rotational rates against the need to maintain the structural integrity of individual blades. Many early aerial vessels suffered accidents when airscrew blades failed under the stress of high revolutions, most notable of these being the terrible loss of HML *Pegasus* while performing maneuvers over the Channel in 1893. An airscrew blade lost by her sister-vessel HML *Perseus* smashed into the *Pegasus*, leading to the untimely death of *Pegasus'* bridge crew and the subsequent crash.

These and other tragic accidents stabilised airscrew design by 1893 around a range of robust and relatively efficient designs. Top speeds of 22 knots were achieved by destroyer and light cruiser-class aerial vessels, while larger ships tended to top out at 16 knots. No matter how reliable the design of an exposed airscrew, however, it remained vulnerable to combat damage. This was most notably demonstrated in 1894 when the French cruiser *D'Entrecasteaux* clashed with the Italian *Vettor Pisani* in the skies over Corsica. Indifferent gunnery failed to cause significant damage to the body of either vessel, but within thirty minutes of beginning battle, both vessels were crippled due to loss of airscrews, leaving them at the mercy of prevailing winds, which blew the hapless combatants in the direction of Africa. Fortunately for the *Vettor Pisani*, it was able to maintain lift until Italian naval vessels exercising in the area could take it in tow, returning it to Spezia; the *D'Entrecasteax* was less fortunate,

## TIMELINE

*1894*

Sino-Japanese War begins. To protect its Far Eastern territories, centered on Vladivostok, Russia pressures France and England to join them in the Triple Intervention.

King Oscar II of Norway and Sweden, as a keen supporter of polar exploration, agrees to fund the purchase of the obsolete *Voracious*-class HML *Troubadore* for Norwegian explorer Fridjot Nansen's latest expedition. There are significant defects with the vessel though, necessitating extensive grounddock time.

*1895*

Development of the first ducted airscrews, making leviathans much more viable in dynamic combat situations. Second-generation leviathans are no longer crippled so easily and the higher efficiency of ducted airscrews makes them capable of carrying greater loads and achieving modest speeds of around 20 knots.

Triple Intervention forces Japan to relinquish control of Manchuria.

eventually taking to the water some two hundred miles south of Marseille and foundering with the loss of over four hundred souls.

The direct result of these unhappy circumstances led by chance in the years 1894 and 1895 to a series of major discoveries in the art of aerial propulsion. Engineers of all civilised nations responded by placing their airscrews inside armored covers, and discovered—to their amazement—that instead of limiting the resulting propulsive force generated, such an arrangement actually increased thrust. This was the genesis of the modern ducted airscrew.

The reasons for this serendipitous result are not easily explained without recourse to complex mathematics. However, an approximate explanation might be that the presence of the armored shroud, or duct, prevents the formation of phenomena associated with the tips of fast-moving airscrew blades, which were (all unanticipated) affecting the performance of exposed airscrews. Further development showed that it was possible to gain further propulsive advantage by using shorter, wider blade configurations, and yet further advantage accrued by placing a second, third or even fourth airscrew in succession in the same duct. This latter discovery was balanced by the increased complexity, and increased rotational rates required, for each airscrew so co-situated in a single duct.

Today, all but the oldest aerial vessels use two, three or more triple ducted fan engines. Leviathans and armored aerial cruisers routinely achieve speeds in excess of 20 knots, while destroyers, the greyhounds of the sky, are designed to attain 40 knots. All this a far cry from the first leviathan's lumbering flat-out rate of 4 knots!

## CONTROL AND NAVIGATION

Leviathans require two separate systems in order to navigate the skies—an electrical system by which altitude and pitch are maintained, and mechanical systems by which speed and heading are controlled.

Altitude and pitch are controlled by means of voltages applied to the vessel's electroid tanks. Typically, all main

## TIMELINE

Germans send Imperial German Army advisors under Jakob Meckel to advise Imperial Japanese Army.

On 14 June, King Oscar II dies and is succeeded by his son Gustav V. One side effect of the king's death is that the scheduled discussion regarding a commercial treaty between Sweden and Norway never takes place, superseded by an official mourning period.

*1896*

British Expeditionary Force led by Lord Kitchener retakes the Sudan. Mahdist forces are unable to stand against British leviathans, including the HML *Inflexible*, aka "HMS Incontinent."

Japanese forces attack Russian garrisons in Manchuria, sparking Russo-Japanese War. Marshal Mikhal Skobelev is cut down leading the breakout of Port Arthur. Japanese offensive bogs down into stalemate in the face of Russian leviathan support.

Russian skyfleet under command of Mikhail Kozlov defeats Japanese naval fleet under command of Togo Heihachiro at Battle of Tsushima.

Japanese lift blockade of Vladivostock.

tanks are charged to the same level, while excitation of the trim tanks compensates for variations in load placement or wind forces. Under emergency conditions it is possible to control pitch by varying power to the main tanks, but this is never done of choice—the consequence of even a minor loss of pitch control can lead to calamities such as shifting coal in the bunkers causing more pitch, to losing water supply to the boilers, with the consequential loss of steam and therefore electricity itself.

Attitude control is accomplished by means of altering power to the vessel's ducted airscrews, in conjunction with assorted control surfaces. It is possible with the latest skyships to channel the outflow from the airscrews to the rear for speed, to the side for maneuvering, and even to the front to achieve a rapid loss of momentum.

As a consequence, leviathans move with unmatched grace and beauty that Herr Zeppelin's skeletal gasbags only mimic. A properly helmed leviathan leaves the ground with the grace of a soap-bubble wafting away in a gentle breeze, turns more gracefully than any yacht, all while preserving a noble air of solidity which uplifts civilized men and awes the native savage. From the bridge of an aerial vessel, the captain's orders are carried out by quick-handed chargemen and keen-eyed helmsmen acting in mechanical symphony.

Leviathans navigate by a combination of charting, dead reckoning and landmarks that would be familiar to most casual sailors. Wind currents can deflect just as easily as those of water, while turbulent air, particularly in the lee of hills or mountains, is as dangerous as shoals to a ship—both leading to unplanned (and unpleasant) encounters with terra firma. Larger leviathans are, by consequence of their great bulk, less sensitive to vagaries of the wind, and of course, immune to rain. Despite this, sensible captains avoid passing through storms where possible, primarily to avoid lighting-induced flashover. Nonetheless, ships cannot always outrun a storm. In 1903 stories circulated of an Italian-protected cruiser caught in a thunderstorm near the Alps. While lightning flashed nearby without inducing disaster, a more insidious threat menaced the gallant crew unnoticed. Subzero temperatures caused the rain lashing the hull to freeze. Ton upon unaccounted ton of burdening ice dragged the vessel lower and lower, to the point where it

## TIMELINE

*1896, continued*

Russo-Japanese War ends; Russia maintains and expands its territory in the Far East.

The Russian victory at the Battle of Tsushima alarms the Swedish government, and a program is rapidly put in place to counter the Russians should they deploy the fliers in their Finnish territory. The Norwegian free trade agreement is seen as a backdoor supply route should the Russians attack. In response, Norway demands the right to have its own consulates in foreign countries. The Riksdag opposes the idea, but King Gustav supports the move as long as they recognise him as king.

*1897-1906*

Development of the ducted airscrew continues. Vittorio Cuniberti invents the two-stage ducted airscrew. Larger (heavy cruiser and battleship) and faster (25 knot) vessels become possible.

Tesla's improved Electrical Transformer-a two-stage coil-further increases lifting

unceremoniously crashed into a forest. While this had the fortuitous effect of breaking lose virtually all the ice clinging to the vessel's lower hull, the captain chose—wisely, in retrospect—to release the charge on all tanks and in effect moor in the forest until the storm passed. Next day, with steam rebuilt and electroid charged, the vessel returned safely to its graving dock for repairs.

Giovanni Bausan. Epic story—but not for this book.

## ARMAMENT OF A LEVIATHAN

The weapons carried by leviathans are a mixture of the familiar and the remarkable—breech-loading cannons and aerial torpedos.

The development of rifled breech-loading cannon is too well known to require much comment here. Leviathans have taken full advantage of this technology, though the transition from naval to aerial gunnery involved challenges to both mounting and aiming the guns.

Initially, all leviathans were armed with what we would recognize as casemate-mounted guns. The quick-firing 3" guns carried by the first HML *Leviathan*, projecting from the hull of a modern vessel, would still be recognizable today. Developed from the secondary mountings common to modern battleships and cruisers, modern casemate mounts provide significant elevation and depression across a wide field of fire. They provide an ideal mix of ease of construction and flexibility; all sorts of guns, from Maxim repeaters to 6" breech-loaders, are mounted in casemates on modern vessels.

As guns increase in size, however, it becomes progressively difficult to mount them in casemates. Provision for recoil

## TIMELINE

capacity. In addition, the new design almost doubles the production efficiency of the next generation of elefacturies.

Third-generation leviathans enter service boasting better range, better armor, similar weaponry. Elefacturies are established in colonies, but offer limited capacity compared to continental production rates.

*1898*

The Fashoda Incident. British and French troops and leviathans clash in the Sudan. An indecisive outcome is regarded as a moral (and actual) victory by the French.

*1899*

A poor showing by the German Imperial Fleet at the Solent Fleet Review leads to Kaiser Wilhelm II to rescind his decree and demand creation of a German skyfleet. Von Tirpitz works with Siemens and Meckel to this end.

The establishment of the *Kaiserliche Luftmarine* in Germany alarms Norway, who fears its sea routes could now be threatened. Pressuring Sweden, who is now becoming irritated with Norwegian diplomatic assaults, Norway's Liberal Party agitates for and

room, given the increased bulk of 8", 9" and even 12" guns, would lead to large voids within the hull of a leviathan. Not only is it difficult to place a large empty space, given the needs to carry lift tanks, trim tanks, boilers and engines, but they become structural weaknesses leading to hull failure under stress—a poor feature in a war vessel! As a consequence, the larger guns became the province of turret mounts, which of necessity must be placed on the upper hull. Within these turrets, heavier guns gain the flexibility of rotation, at the cost of flexibility; turreted guns typically elevate or depress half as far as smaller, casemate-mounted guns. Even so, turrets are too useful to ignore, and even the smallest leviathan will often deploy its single light cannon in a bow turret.

(Despite the illustrations of imaginative artists, turrets mounted on the ventral side of leviathans have not been used in practice because they are significantly more complicated to assemble using current shipyard practices. In any case, fire from casemate mounts on the lower hull and supporting fire from accompanying vessels serves to minimize this potential point of vulnerability.)

Regardless of the mounting, air-to-air gunnery firing uses flat trajectories. The reasons for this are obvious—aiming guns reliably from the flat surface of the ocean was challenging enough for naval gunners. Adding the third dimension simply makes the whole process that much more complex, and no amount of smoke-shells, heavy tracer fire or other trickery can change that simple truth. As a result, heavy ships carry a balanced armament of various calibers—light guns suitable for fending off aerial destroyers, quick-firing medium guns which might not penetrate a leviathan's belt armour but could open an airscrew duct or hole a less protected area, to the massive main guns of up to 12" which, while few in number and slow-firing, can potentially open a massive breach in an opponent's heart. Proponents of the "big guns only" school of armament were dealt a decisive blow at the Battle of Tsushima, where the volume of fire from the lighter *Berkuts* proved decisive in crippling the Japanese battleships despite their main guns, which had longer ranges but were slower to aim and reload.

Finally, the aerial torpedo marks the smallest vehicle currently capable of electrical flight, albeit for only a short

## TIMELINE

achieves a defense pact with Denmark, a situation reminiscent of the Kalmar Union.

*1899–1902*

The Second Boer War: a lengthy war involving large numbers of troops from many British possessions, which ends with the conversion of the Boer republics into British colonies. Leviathans are employed by Britain but prove less effective against well-equipped guerilla fighters than against typical "native" forces.

*1900*

Boxer Rebellion in China.

King Humbert I of Italy assassinated by anarchist.

The Dwarvslei Massacre: Australian troops kill Boer irregulars.

The French ship *Lave* is attacked by the German light cruiser *Kolberg*. Both sides deny the incident, though the French claim if it did happen, they were victorious-lending credibility to the reports of the engagement.

*1901*

Riots in Russia; Nihilists and students blamed.

period. A steam engine operating at otherwise insupportable pressures, for a lifetime measured in tens of seconds, provides both motive and electrical power to launch and levitate a powerful explosive charge towards a foe. Once set on course, these fragile contraptions—almost as dangerous to their masters as to their opponents—proceed to their doom without deviation (giving them the popular name "straight-shot" torpedos), guided by collapsing fins which are stretched out at or just before launch. The charge at the nose of such an aerial torpedo exceeds that of even a 12" shell, and when skillfully handled—an all-too-rare event—can strike with devastating impact. While the Whitehead model is the most popular aerial torpedo employed by sky navies around the world, the Austrian Luppis and French *Schneider et Cie* are well-recommended by other users.

The most important fact about the aerial torpedo is that due to their light weight in contrast to the heavy weight of guns, even the lightest vessel can carry several. This can give a humble destroyer-class vessel the potential striking power of even the largest of leviathans. sky vessel can carry several, giving a humble air destroyer the potential striking power of a leviathan. The prospect of a squadron or two of lighter vessels all discharging their torpedoes simultaneously no doubt gives captains of larger vessels reason for troubled sleep!

*The Farragut, with Sperry's gyroscope Nikolai and M. control?*

## TIMELINE

President McKinley assassinated by Polish anarchist; Teddy Roosevelt sworn in.

Theodore Roosevelt dedicates the American Sky Academy in memory of the late President McKinley.

Trial of Australian troops under Capt. Harry "Breaker" Morant implicated in Dwarvslei Massacre ends in mutiny of Australian troops under command of Lord Kitchener. Rear Admiral Percy Scott, commanding HML *Scylla*, bombards mutinying troops.

Italian and Austro-Hungarian leviathans clash outside Valona Harbour; the Italians coordinate with naval vessels and drive off their foes.

Queen Victoria of England dies and is succeeded by Edward VII.

*1902*

Coronation of Edward VII of England.

Friedrich Krupp dies of apoplexy, age 48.

British aerial vessels bombard Venezuela.

Federated States of Australia declares independence from Great Britain, citing treatment of Australian troops in Boer War.

French and Italian leviathans clash over Sicily.

The neo-Kalmar Union falls apart with Denmark's acceptance of Germany's Kiel Declaration, guaranteeing the sovereignty of any vessel in the Baltic. Though it is aimed at Russia's growing presence in the region, Sweden sees Denmark's move as a precursor to a split with Norway (and a Danish-Norwegian union (again)). Losing Norway leaves Sweden surrounded by potentially hostile nations, a situation that Sweden can ill afford.

Skirmish over the English Channel between French and British squadron results in the loss of the HML *Rapier*.

An Italian ship, *Atlas*, experiences a "navigation error" causing them

# TIMELINE

to cross into France. They are confronted by the *Pontbriand* which, despite extreme damage, manages to devastate the *Atlas*, forcing her to withdraw.

*1903*

British forces march on "Mad Mullah" in Italian Somaliland.

Wrights fly first heavier-than-air aeroplane.

British PM Balfour declares the Salisbury Doctrine: the skies over the English Channel belong to England.
Clashes between British and French air cruisers.

SMS *Westfalen* enters Australian territories, berthing at Port Moresby. Germany enters into a security arrangement with the Federation, leading to the *Westfalen* remaining in Australian skies for three years.

*1904*

Britain goes to war in Tibet against rebels; Gurkha and Sikh regiments carry the day.

Theodore Roosevelt elected president of the United States in his own right.

The Norwegian Storting, dominated by the Liberal Party, puts forward a motion to dissolve the Union, citing public dissatisfaction and economic disparity. After a long debate Parliament agrees and presents the bill to the king. Nonplussed, Gustav says that if it is supported by the public, Parliament must prove it, and suggests a plebiscite.

Sweden, dependent on Norway's mutual support, is not keen to lose its partner and Swedish business interests pool together significant funds to run an anti-dissolution public relations campaign in Norway. In a near run the Norwegians vote for dissolution. In what is seen in Norway as a sellout by the government, the king convinces them to set the date of dissolution in five years time, 1909.

The French vessel *Charlemagne* fights a skirmish with a German patrol squadron in the Pacific forcing the Germans to withdraw. The French surprise the world with the christening of the *Montpellier*. The construction of this ship was done in secret and created a stir in aviation circles in attempts to learn where the new French construction facilities are located.

*1905*

Schmidt Mutiny occurs in Sebastopol; Russian leviathan corps turns against itself. The Loyalists prevail, but at the cost of Marshal Ardan Tomav, the famed Falconer.

A German squadron led by the *Donnerschlag* claims it is suffering engine problems and drifts across the French border. A fierce battle against the lone French battle cruiser *Le Fantasque* results in the loss of one German ship and the retreat of three others.

*Les Cigognes* bait a British squadron into battle in the English Channel. The British claim that they were the victors but most aviation pundits believe the engagement was won by *Le Cigognes*.

*1906*

Britain unveils a new, even larger class of sky battleship-the HML *Leviathan*, fourth of that name-great enough to carry turreted 12" guns.

Russian tsar orders secret police to purge leviathan corps of all dissidents. The Russians' main elefactury is razed to the ground to symbolise the death of the old order.

*1907*

French leviathans shell Casablanca over the murder of nine Europeans.

# TIMELINE

The "Great White Fleet"–the US Atlantic Sky Fleet–begins circumnavigation of the globe.

HML *Philopoemen*, under Captain John "Black Jack" Christian, levels section of Calcutta in response to the murder of his crewmen.

German SMS *Kaiserin* and French *Dunquerque* clash in skies over Franco-German border.

*1908*

Frenchman makes first circular flight in heavier-than-air aeroplane.

Portuguese king shot in back by anarchist.

"Young Turks" revolutionary movement forces changes on Ottoman sultan.

The Great White Fleet visits Federated States of Australia.

East of Marseille the French squadron, *Les Lanciers Rouge*, engages an Italian squadron that has crossed the border inadvertently. In the brief battle the *Peregrine* is badly damaged but successfully outmaneuvers the Italian ships forcing them to withdraw.

*1909*

Young Turks topple the Ottoman sultan.

The Great White Fleet returns to Rhode Island, completing its epic round-the-globe journey.

British and German leviathans clash over the Skagerrak. British attempts to bottle-in the Germans fail. SMS *Friedrich der Grosse* blasts HML *Suffolk* out of the sky in a single broadside.

The Scandinavian Union's Royal Navy attempts to bottle up the German fleet at the Skagerrak. The Germans defeat the British, but more importantly, it demonstrates to the Norwegian parliament how weak their defense actually is. Citing security concerns, the ruling party declares the date of dissolution will be put back another five years in order to make Norway "strong enough on its own." Public outcry follows, but for the moment at least the population is prepared to tolerate another delay. A vocal minority pushes for immediate dissolution.

Alfred Lord Northcliffe announces a £50,000 reward to any leviathan that completes a course to the North Pole.

*1910*

Halley's Comet passes earth.

Edward VII dies; succeeded by George V.

Revolution ousts Portuguese monarchy.

HML *Leviathan* and *Jean Bart* clash over Egypt.

HML *Spion Kop*, flagship of the Royal Sky Fleet's Channel Squadron, is heavily damaged in a training accident.

British and French vessels rescue the freighter *Southhampton Blue* in the first documented case of leviathans engaging pirates.

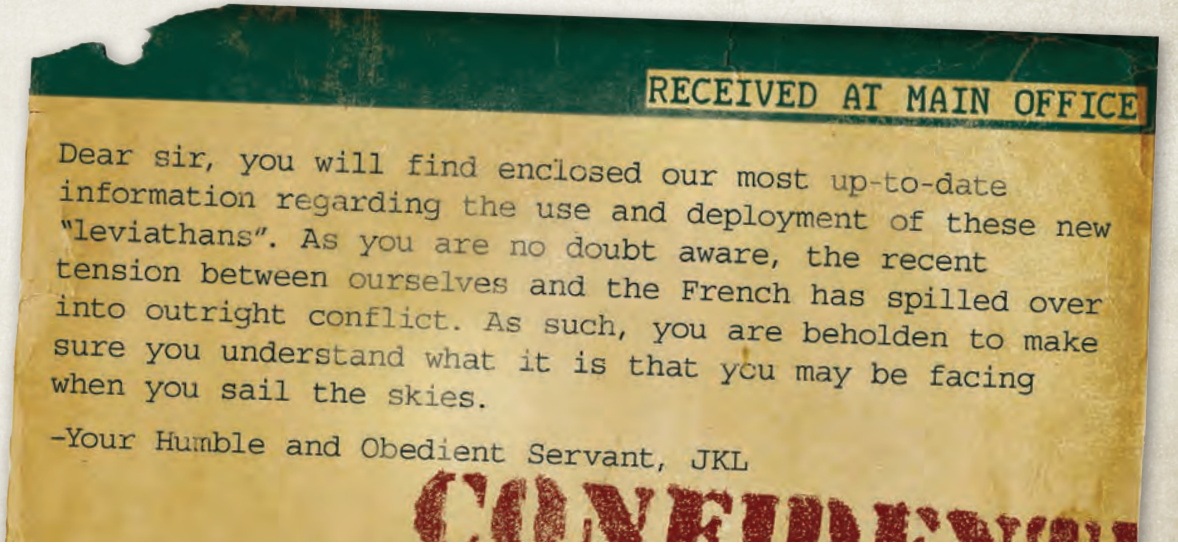
Five vessels participate in Alfred Lord Northcliffe's "Race To the Pole": German SMS *Flugboot*, Russian *Krimskaya Borzaya*, British HML *Indefatigable*, French *Clarion* and American USS *Camp Teller*. Both the *Clarion* and *Krimskaya Borzaya* vessels withdrawal early from the race due to arctic weather. The race ultimately ends in disaster as all three vessels crash under suspicious circumstances; only the German crew survives.

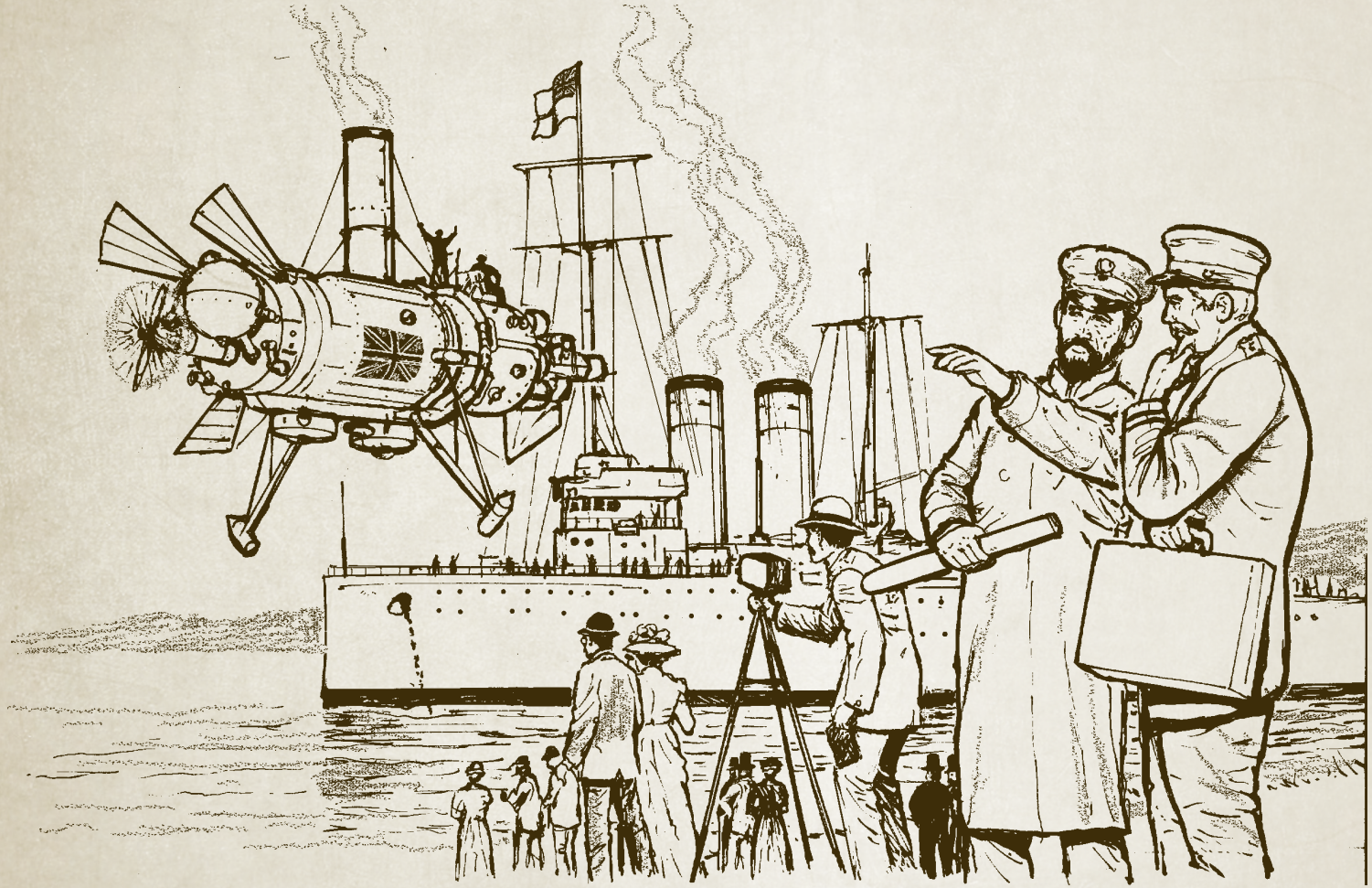
# SAIL HIGH FOR KING AND COUNTRY

## THE GOLDEN JUBILEE FLEET REVIEW

British scientists had been aware of the incredible properties of electroid since the work of Fedor Oblimovsky was first brought to the attention of the Royal Academy of Sciences in 1885. But not until Her Royal Majesty Queen Victoria's Golden Jubilee celebrations did they start investigating it in earnest. Indeed, had not the Foreign Ministry learnt of the French plans for their "aether flyers" and the threat that it represented to British sovereignty, the Admiralty's program may never have come about.

When informed of the French advances whilst—looking over the Royal Navy's Fleet Review in Spithead—Her Royal Highness asked her aide de camp and Director of Naval Ordnance, the charming Captain John "Jackie" Fisher GCB, to examine the likelihood of a British response to the French threat. In Her Majesty's eyes, the idea was no more than a pipe dream, but Captain Fisher attacked the project with his usual zeal.





## "JACKIE" FISHER

Born in Ceylon in 1841, Captain Fisher began his Navy career when he signed onto the HMS *Victory* at the age of thirteen. Having held various posts during his career, Captain Fisher first came to the attention of the Royal Family when he was convalescing in England after the Anglo-Egyptian War in 1882. Fisher's idea of armoring a locomotive with steel plate and cannon caught the fancy of the public. During his convalescence he became good friends with His Royal Highness Prince Edward and his wife Alexandra. Shortly thereafter he was made a Companion of the Order of Bath, and received a visit from Her Majesty Queen Victoria.

But the genesis for his tremendous influence on the rise of leviathans can be traced to his time as commander of the HMS *Excellent*, where he first gathered a following of such important personages as Percy Scott and John Jellicoe. These men all shared a common concern regarding the lack of offensive capabilities of the British fleet, with Scott proposing several new ideas to improve naval gunnery. But at the moment all three men were minor players within the Greater Admiralty. Fisher's appointment as Director of Naval Ordnance, responsible for developing new weapons for the Admiralty, was a step in the right direction for these men's ambitions.

Upon his appointment as Her Majesty Queen Victoria's Aide de Camp in 1887, Fisher was well placed to take advantage of the opportunity before him. The so-called "aether flyers" provided a platform on which to test his ideas and those of his counterparts.

## LORD KELVIN

William Thomson, First Baron of Kelvin, referred to as Lord Kelvin, first came to Fisher's attention for his work with the Admiralty regarding adjustable compasses. Whilst suitably impressed with the man's innovation, it was the fervor with which Lord Kelvin had lobbied the Admiralty to accept his proposals that convinced Fisher that he was the right man to head the scientific side of the aether flyers project. Convincing Kelvin to take on the task proved harder than first thought, as he was skeptical about the likelihood of success and even the practical application of aviation. Nonetheless, Fisher persuaded the other man, and with a team from the Royal Academy of Sciences (what would become known as the E Committee), set about following in the French footsteps.

## BEFORE THE GREAT EXHIBITION

Much has been said about the Great Exhibition as the "birthplace" of the leviathans, but nothing could be further from the truth. Using his position of Director of Naval Ordnance, Fisher subverted the facilities at Whale Island, berth of his former command, HMS *Excellent*, for use in developing the first experimental aether flyers. Relying extensively on the Foreign Ministry to keep them up to date with French progress, Kelvin and Fisher had little luck bringing the flyers to life until, in 1889, one of Lord Kelvin's counterparts, James Alfred Ewing, made a breakthrough with electrical fluid. Lord Kelvin used his relationship with the American scientist Nikolai Tesla to build several of the American's aether generators to place on Fisher's Prototype; the hull had been built in secret at a new dry dock in Portsmouth before being moved to Whale Island.

Fisher was unwilling to risk the prototype without a practical demonstration first. Ewings, keen to prove his theory, built a miniature flyer around an old water tank, adding banks of batteries powered by one of Kelvin's

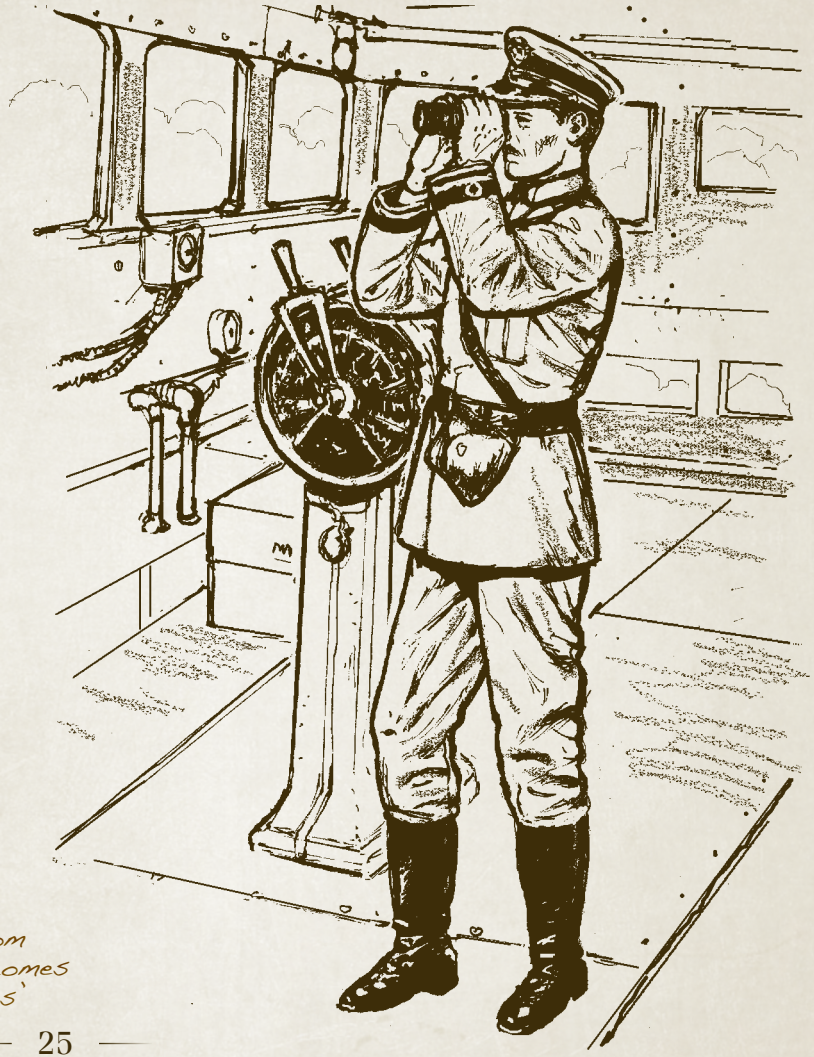
generators. Tom Ablett, Ewing's coachman, rose into the air on the miniature to a height of fifty feet, eliciting excitement from all present, even the cynical Lord Kelvin. But when the boiler burst its seams, the flyer lost power and Ablett plunged to his death. Despite this tragedy, Fisher called the experiment a success. Ewing blamed himself for Ablett's death, and committed suicide mere days before the Exhibition.

With evidence that the ship would indeed fly, Fisher ordered rapid-fire guns and armored casemates fit to the ship. The Foreign Ministry had provided constant, if perpetually outdated reports of French progress, and Fisher was keen to learn of the French flyer's armament. When he first saw the armed flyer levitating thirty feet above the water next to HMS *Excellent,* Kelvin turned to Fisher and said the words that would give the new vessels their name:

"With a fleet of these, England truly will become Hobbes' Leviathan!"*

## THE GREAT EXHIBITION

The story of the Great Exhibition has been repeated *ad nauseum* in the periodicals of the day, but if you still happen to be unaware of it, the revelation of the HML *Leviathan* in response to the French display of the *Ganymède* sparked the arms race in which we currently find ourselves. What is less well known is the fact that the crew of the *Leviathan* were little more than boys, cadets drawn from TS *Stirling* berthed at Whale Island, and captained by a very nervous Fisher himself. Fortunately, the display served its purpose of amply demonstrating British superiority.



*Most people assume "Leviathan" came from the biblical sea monster, but in reality it comes from the frontispiece of Thomas Hobbes' book of the same name.

# BRITISH EMPIRE LEVIATHAN RANKS

***Officer Ranks***

Sky Admiral
Sky Rear-Admiral
Sky Captain
Sky Commander
Lieutenant Commander
Lieutenant
Ensign

***Enlisted Ranks***

Chief Petty Officer
Petty Officer
Leading Airman
Able Airman
Airman

***OFFICER RANKS***

Due to the flat officer-rank structure, seniority through time spent in rank applies. For example, a sky commander with five years in rank is the superior of a newly promoted sky commander.

***Sky Admiral***

There is only one sky admiral, currently Third Sky Lord Percy Scott. The sky admiral is in command of the entire Sky Fleet, second only to the First Sea Lord. Ultimately, the sky admiral's role is to liaise with the Royal Navy and Parliament, representing the interests of the Sky Fleet in the halls of the Admiralty.

***Sky Rear-Admiral***

There are three sky rear-admirals, responsible for the Fleet, Construction and Training respectively. Sky Rear-Admiral John Jellicoe is the most senior sky-going officer in the Sky Fleet, and is responsible for the deployment of the Fleet. The Sky Rear-Admiral Construction is responsible for the building of new vessels, requiring the position be based at Portsmouth. The Sky Rear-Admiral Training is responsible for crewing the existing Fleet, as well as the development of new technologies. The Office of Aerial Ordnance falls under the Training Command. The Sky Rear-Admiral Training is based at Whale Island.

***Sky Captain***

Sky captains are those senior officers who have served on multiple vessels, and are given command of the various Flotillas of the Sky Fleets. Due to the distances they travel, sky captains have relative autonomy whilst on deployment. As such, the Sky Rear-Admiral of the Fleet ensures that only the most trustworthy officers reach the sky captain rank. Sky captains are also those officers who are placed in command of the Sky Fleet's powerful battleships, ensuring that those impressive vessels are commanded by the most able officers in the Fleet.

***Sky Commander***

Sky commander is generally a stepping stone rank. Commanders will serve as the executive officers to sky captains on battleships, or serve as the second-in-command of a flotilla. More importantly, sky commanders rotate out of command to serve as instructors at Whale Island or on the staffs of the various development committees. In these venues they learn the lessons of higher command, which will serve them in good stead as they advance up the ladder. More rarely, a sky commander will be given command of a light flotilla, generally as commanding officer aboard a heavy cruiser.

***Lieutenant Commander***

Lieutenant commander is the most likely rank of the commanding officer of a leviathan. These officers will serve under a sky commander or captain as a part of a flotilla. Occasionally, lieutenant commanders will be placed in command of a destroyer flotilla, especially those deployed on picket duty in the far reaches of the Empire.

***Lieutenant***

Lieutenants generally earn their commission upon completion of their first cruise, and most will choose their preferred role at this point. Gunnery officers will attend HMS *Excellent*, whilst Engineering officers will attend a further electroid course based

at Portsmouth. Most officers will remain lieutenants for most of their careers, as promotion is based on merit from this point on rather than time in service.

### *Ensign*

Every graduate that leaves the classrooms of Whale Island starts as an ensign onboard one of the Sky Fleet's vessels, serving wherever the leviathan's commanding officer deems necessary. What invariably happens is that the young officer is sent to learn alongside a leading airman (Leed), or even the petty officer (PO). Typical assignments are Engineering, Navigation, Director Towers and so on, with most commanding officers rotating the ensigns through different roles on the leviathan. An ensign typically will be promoted at the completion of their first cruise, dependent upon their performance.

## *ENLISTED RANKS*

### *Chief Petty Officer*

Officially, a petty officer who has served twenty years in the Sky Fleet may be promoted to chief petty officer, but in reality, the Sky Fleet only has one CPO: Chief Petty Officer Daffyd Jenkins. Jenkins is currently the longest-serving non-commissioned officer in the Fleet, having stoked the boilers of the HML *Leviathan* as a young man. As the Fleet has expanded, the number of POs eligible to become CPOs has increased, but so far Sky Lord Scott has resisted promoting anyone to Jenkins' level.

### *Petty Officer*

A leading airman who has served in the Sky Fleet for over ten years may be promoted to petty officer. POs (petty officers) are the senior NCOs onboard a leviathan, enforcing the captain's will. Generally a PO onboard will not be assigned to a particular role, going wherever the captain deems the leviathan's complement weak, but some larger vessels will have multiple POs, especially those with larger crews. This is likely to change as more POs reach the rank of chief petty officer. There is no such thing as combat promotion to petty officer.

### *Leading Airman*

An able airman who has served over five years in the Sky Fleet will be promoted to leading airman. Leading airmen (or Leeds) regularly command entire gun batteries, oversee the electroid tanks, command boarding parties and, most importantly, enforce discipline amongst the crew. The Leeds are the petty officer's eyes and ears onboard, and report to the PO every watch. Combat promotions are very rare, requiring the leviathan's captain to approve the brevet.

### *Able Airman*

An airman who has served his time aboard a leviathan and chosen to re-enlist will be promoted to the rank of able airman. A 2A (able airman) is generally placed in command of a work crew, dependent upon their onboard role. 2As lead gun teams, damage-control parties and enforce the petty officers' orders. Combat promotions to able airman are fairly common.

### *Airman*

Airman is the lowest rank in the Royal Sky Fleet, and as such are the most prevalent amongst those serving in the sky. An airman's title refers to his role onboard His Majesty's vessels, so a Signaler and Bombardier are both airmen. Most airmen serve onboard a single leviathan during their stint in the Sky Fleet, either choosing to re-enlist after their required eighteen months, or returning to their civilian lives.

## SKY VERSUS SEA

The biggest challenge that Fisher and his leviathans would face would come not from the French, but from the Admiralty itself. Even now the Admiralty sees the leviathans as "flying toys": in the beginning, they barely considered them at all. They were pleased Fisher was able to show up the French, but in truth wanted to shut down the program quickly, as it was proving a drain of both resources and personnel. Promoted to Rear Admiral, Fisher was made Admiral Superintendant of the Portsmouth shipyards, where it was hoped the drive he had shown getting the leviathan program literally off the ground would boost the shipbuilding industry there.

The leviathan program was deemed a success and, British supremacy having been demonstrated, was put aside in order for the Admiralty to concentrate on "real vessels." It would again be at the Fleet Review that the fate of the leviathans would change. At the invitation of Her Majesty Queen Victoria, the French fleet was invited to visit the 1891 Review (in order to view the might of the Royal Navy). However, Her Majesty was not amused when the French naval fleet arrived, accompanied by a commensurate fleet of French leviathans. When she asked First Sea Lord Sir Richard Hamilton where the British flyers were, she apparently became angry when told that the Royal Navy had abandoned the flyers to concentrate on "proper" vessels.

Incensed, Her Majesty demanded to speak with "Jackie," and was further angered when told that Admiral Fisher was at Portsmouth, overseeing the construction of new sea-going vessels. Stripping Sir Hamilton of his position as First Sea Lord, Her Majesty demanded to be taken to Portsmouth to talk with Admiral Fisher. When brought before Her Majesty, Admiral Fisher was appointed Third Sky Lord, and told by Her Majesty to build a fleet of leviathans to "shame the French."

Even with the mandate of the queen, now-Admiral Fisher still had to contend with the Admiralty establishment opposing the relevance of the new class of vessel. For the next few years, Fisher would continue to research and develop further improvements to the leviathans and introduce several innovations, several of which would become commonplace on the seagoing vessels of the Royal Navy. Fisher's biggest problem was the division of labor, and fighting the Admiralty for the men to crew his new vessels. This all changed with the Russian victory at Tsushima.

### AFTER TSUSHIMA

By now you should have a good understanding of the outcome of Tsushima, and the role which Russian leviathans played. The result for Admiral Fisher was that the Admiralty for the first time saw the threat that leviathans could pose to the greater Royal Navy. Yet they still proved resistant to the idea of increasing the size of Fisher's fleet. Fisher and his leviathans were served by the addition of two key members to his team.

Captain Percy Scott, long an advocate of better gunnery practices, had achieved a result of eighty percent in the 1897 Royal Navy gunnery trials. Because this was an unheard-of high score, Scott was accused of cheating, and as a result of the resulting furor, Scott was removed as Captain of the HMS *Scylla* and placed on half pay. Seeing a chance to gain another innovator to his cause, Admiral Fisher intervened and sent Scott to HMS *Excellent,* the training school and headquarters of the nascent leviathan fleet.

Along with Scott, Fisher appropriated another officer in Commander John Jellicoe. Since having been the executive

### Sir Devon Cavendish

An Old Etonian, Cavendish is the newest member of the Privy Council. Only forty years old, Cavendish is the youngest son of the seventh Duke of Devonshire, William Cavendish, and has followed his slain brother Frederick into politics as MP for West Riding. Cavendish was wounded in his service with the Kings Own Scottish Borderers during the conflict in Africa and walks with a pronounced limp.

Lord Cavendish has frequently clashed with First Sea Lord Fisher over what he sees as Fisher's "timid" use of the leviathans (and Navy as a whole). Lord Cavendish is also the brother of Spencer Cavendish, widely touted to be the next Prime Minister of England, and it is thought that the elder Cavendish is slowly coming under the influence of his more headstrong brother. With his appointment to the Privy Council, it is expected Lord Cavendish will push his hard-line agenda to the King himself.

Most interesting to the officers of the Sky Fleet, however, is the fact that Lord Cavendish has offered his family's estates and lodgings for the use of several senior officers. Whilst the majority of leviathan officers are products of the Royal Navy and First Sea Lord Fisher's tutelage, a growing number see Lord Cavendish's promulgation of British dominance as increasingly more attractive, especially in the light of their continued snubbing by the Admiralty.

officer of the HMS *Victoria*, which had been rammed and sunk Jellicoe had been in a funk. Admiral Fisher, however, knew the younger mans was the sort who would benefit the leviathan program. More importantly, the Admiralty knew the younger man was the sort that would benefit the leviathan program, and more importantly, the Admiralty would not oppose his "going over." Together the three men would innovate leviathan tactics and create further developments used by both the leviathans and the royal Navy.

## THE SECOND BOER WAR

The parade of leviathans flying above the Royal Navy as it steamed across the Solent near Spithead in the 1899 Fleet Review proved the impetus that caused the German kaiser to restart his nation's own leviathan program, but it also served as the genesis of a much bigger incident that would rock the entire Commonwealth to its core. With the Queen unable to attend, Edward, the Prince of Wales, presided over the Review. Using his acquaintance with Fisher as a pretext, His Royal Highness pulled Fisher aside and into counsel with Lord Kitchener, who was preparing an expeditionary force for the new war that was underway in South Africa.

Kitchener was no stranger to the flying warships, having used them to face down the French in the Fashoda Incident of 1898. He'd also used them to bombard the forces of the Mahdi during the Battle of Omdurman of the same year. So when he requested Fisher send a flotilla of leviathans to suppress the Boers, Fisher was apprehensive, knowing the brutal way Kitchener had deployed the HML *Inflexible* during the Sudan uprising. In the end, Lord Kitchener was granted his flotilla, and the combined fleet set sail for the Transvaal.

Kitchener's campaign against the Boers is well known, and aside from providing the equivalent of artillery

support, the leviathans under the command of now-Rear Admiral Percy Scott played little role in the free-ranging conflict at the outset. Indeed, it was not until the infamous Dwarvslei Massacre and the resultant trial that the leviathans would play a role. A group of Australian cavalrymen went on a murderous spree when they saw their British commander gunned down by a group of Boers. The resultant trial of the men involved turned into a farce when a mob of Australians came to protest the treatment of their countrymen. The protesters believed the accused were merely following Kitchener's "take no prisoners" order. The demonstration resulted in Kitchener deploying forces to surround and detain the protesters.

The Australians were faster than Kitchener's forces, and an impromptu battle began, first with fists, but later with weapons as both sides escalated the violence. When an Australian horsemen cut down several of the British officers, Kitchener ordered the HML *Serenade* to fire on the Australian lines, outraged that they would refuse orders and that they had taken up arms. When Commander Hubert Raines refused, Kitchener ordered Rear Admiral Scott to do it. Scott followed the orders and brought the HML *Scylla* over the Australian main camp at Pietersburg. In ten minutes of British fury the Australian camp was scoured, resulting in over two hundred casualties. The Australian Mutiny ended, and the ringleaders were found and sentenced to death by firing squad by Kitchener himself. Scott himself wrote to Fisher deploring the use of the leviathans as "executioner's tools."

Three months later, the Federated States of Australia declared themselves independent of the British Commonwealth, citing the brutal treatment of their men in the Boer War. Infuriatingly for the Foreign Ministry, both the French and German governments recognized the Australian independence, and the French have since deployed several of their leviathans to the region, keen on gaining a stronger foothold in Southeast Asia.

*Ungrateful colonials! As if they would be made scapegoats—it was their own bloodlust that caused this despicable rebellion!*

## KING EDWARD VII AND FIRST SEA LORD FISHER

With the death of his mother in January 1901, Edward Prince of Wales assumed the throne and the title of His Majesty King Edward VII. With His Majesty on the throne, the lot of the leviathans was again greatly improved. As a long-time friend of the monarch, Admiral Fisher was promoted to Second Sea Lord and second-in-command of the Royal Navy. With Fisher's promotion, Rear Admiral Scott was promoted to full Admiral and made Third Sky Lord of the Royal Navy and commander of the leviathan fleet. Admiral Fisher expanded his reforms to cover the entire Royal Navy, as King Edward had renamed the leviathans in the Royal Navy. Since that time, the Royal Navy has greatly expanded the Royal Sky Fleet, helped further by Fisher's election to the House of Commons, and immediate promotion to First Sea Lord.

Since that time, the Royal Navy has greatly expanded the Royal Sky Fleet, helped further by Admiral of the Fleet Fisher's ascension to First Sea Lord in 1904. With Fisher's backing, HMS *Excellent* now runs joint gunnery courses for the officers of both the Royal Navy and Royal Sky Fleet; however there is still considerable tension in the Admiralty establishment regarding the promotion of the leviathans from mere escorts for the Royal Navy to near-equals.

Though tensions continue to build, Third Sky Lord Admiral Percy Scott has deployed his leviathans to many of the Empire's trouble spots, with small skirmishes against the French and Germans becoming almost commonplace. The Royal Sky Fleet remains the premier force in the skies, with no nation daring to confront the full might of the combined Fleet.

### SKY COMMANDER FREDERIC CHARLES DREYER

Like most of his peers, Sky Commander Dreyer began his military career in the Royal Navy, signing up in 1891 and achieving high marks in all his examinations and positions. Appointed gunnery officer of the Royal Navy's flagship HMS *Exmouth* in 1903, it was during this assignment that Dreyer was first exposed to the ideas and theories of Third Sky Lord Scott regarding accurate gunnery. Despite the tension between the Sky Fleet and the Navy, Dreyer successfully petitioned to attend the gunnery course at Whale Island. There he met Admiral Scott and first crewed a leviathan.

Currently executive officer to Rear Admiral John Jellicoe on the HML *Victoria*, Sky Commander Dreyer is the rising star of the Royal Sky Fleet. Instrumental in developing a range-finding tool that would function accurately during aerial battles, Dreyer has been proposed to soon receive command of his own leviathan, though rumor has it First Sea Lord Fisher is considering appointing him to the position of Director of Aerial Ordnance in order to turn the younger man's talents to further developing the Sky Fleet's weaponry.

### LIEUTENANT COMMANDER HUGH "THE CAMEL" TRENCHARD

Unlike nearly every other officer in the Royal Sky Fleet, Commander Trenchard began his career with the Royal Army. Failing both the entrance exam for the Royal Navy and the Woolwich exams (twice) for entrance into the Royal Military academy, Trenchard applied for the Militia, which exams he also failed twice. Eventually passing the Militia exams, Trenchard was deployed to India (where he earned the nickname The Camel) as a second leftenant.

But it was his service in Africa that would prompt his transfer to the Sky Fleet. The catalyst of the Dwarvslei Massacre (Trenchard was the British officer felled in front of the Australian troops), Trenchard saw firsthand the destructive power of the leviathans when the HML *Scylla* razed the Australian encampment at Pietersburg. Evacuated to England to recover from his injuries, Trenchard called on the connections he had made in India to gain a meeting with First Sea Lord Fisher. Intrigued by the idea of a solider serving on the leviathans, Fisher granted his transfer, and since barely scraping through his examinations, Trenchard has taken position as gunnery officer onboard the HML *Invictus*.

## HML LEVIATHAN

The flagship of the Royal Sky Fleet, the *Leviathan* little resembles the vessel that first took the skies above Whale Island. Now the fourth iteration, the vessel has seen conflict at the four corners of the globe. Festooned with barbettes and turrets, the *Leviathan* is perhaps the grandest of the aether flyers in the skies today. Never has she been defeated in combat, and with a reputation such as she has, it seems difficult to ever imagine she will fall.

With his interest in the Royal Sky Fleet and specifically the *Leviathan*, it was particularly fitting for the previous vessel bearing this name—the third iteration—to serve as the centerpiece of the King's Coronation Review. Admiralty officers had raised objections regarding the "lack of proprietary" in having a "mere toy" represent the combined Royal Navy, but First Sea Lord Fisher ensured the *Leviathan* had its day in the sun—a situation reflected in the pride of the current flagship.

Currently deployed in the Middle East, the *Leviathan* has had to face down continued French probes of Empire territory. Sky Captain Kent Graham has been particularly effusive about the actions of one of his gunnery officers, Lieutenant David Chandler. If the rumors of the new Director of Aerial Ordnance prove true, it would seem Chandler would be a natural addition to Dreyer's team.

## HML PHILOPOEMEN

Not all leviathans have a gleaming reputation, but none other have the black stigma that surrounds the *Philopoemen*. An *Edward VII*-class leviathan, the *Philopoemen* has had a brutal reputation under its captain, "Black Jack" John Christian. Even though minor infractions are punished by floggings and the use of Christian's new "God Walk" (a six-inch-wide plank is lowered below the *Philopoemen*, and the convicted man must stand on it untethered as the vessel sails), morale on the *Philopoemen* is surprisingly good. (Some observers say this is due to the threats that Christian and his officers use to motivate the crew.)

But the *Philopoemen*'s reputation is largely derived from its actions in Calcutta. When on a layover, several of the *Philopoemen*'s crew were found dead in the streets after a particular long night's roughhousing. In retaliation, Christian used the *Philopoemen* to level to the ground the entire quarter where his men's bodies were found, as a lesson to all present regarding "the sanctity of a white man's life."

First Sea Lord Fisher has admonished Christian for his actions, but as yet has not removed the Sky Captain from service. Rumor has it that Admiral Fisher despises Christian, but relies on him to use the leviathans in actions in which other Sky Fleet captains have either balked or, more likely, raised moral objections.

# ESPRIT DE CORPS

By: Air Commodore Randolph Fairfax ESQ
Commander, North Sea Jackal Squadron

I apologize for the blunt informality of this report, but as a squadron commander, my perspective of the French is not clouded by political views. While many of my contemporaries may curse the bloody French for their unveiling of the Ganymede and the subsequent political embarrassment, I have come to develop a healthy respect for my Parisian colleagues. What some have labeled as audacity for constructing a warship on our soil was simply the first step of the French rising once more to be a dangerous world power.

They have demonstrated boldness, daring and tenacity in their use of leviathans, and despite the stories favored by the penny dreadfuls, have cast themselves as serious threat to our power.

## THE GANYMÈDE AND THE GREAT EXHIBITION

History records that the debut of the leviathans was at the Greater Britain Exhibition when the French launched the *Ganymède*—which was almost immediately countered by a flyover by the *Leviathan*. Much has been written about the "shock and shame" of this revelation, though most ardent students of history believe that it was the *Leviathan*, not the *Ganymède,* that truly made history that fateful day.

What has been determined by our foreign service is that the parts for the *Ganymède* were smuggled in under the guise of industrial and locomotive parts. The fact that their first lev was assembled on British soil is a matter of national embarrassment.

The grand reveal of the *Ganymède* was an incredible stunt deliberately aimed at stinging our national pride, but few realized the larger implications at that time. Despite its initial impracticality as a warship, it demonstrated that Great Britain alone did not possess leviathan technology. When the USS *Monitor* first fired its revolving turret, it was a turning point for the United Kingdom. Despite the iron-hulled HMS *Warrior*, we were faced with the fact that our wooden ship fleet was obsolete. Likewise the *Ganymède* took the wind from our proverbial sails. Yes, we had the *Leviathan,* but one of our oldest enemies possessed a technology that made our wet navy obsolete again.

The *Ganymède*'s return flight to Paris after the Exhibition had as large an impact on our military planners as the unveiling of the ship. Flying right over the battleships of the Channel Fleet, she showed suddenly that our entire island was susceptible to aerial attack. The press coverage of that flight was a defining moment in our military planning. Make no mistake, the *Ganymède* and her flight over the channel to Paris caused the largest overhaul in defensive planning and preparation since Napoleon's reign of terror, despite the Admiralty's constant interference to the contrary.

## THE GREAT SKY RACE

The French immediately recognized the full potential of lev technology in terms of strategic power and reach. They created two primary construction docks in the interior of France at Bordeaux and outside of Grenoble. These facilities are rumored to be true air-fortresses, barely accessible to ground attack.

Whereas the Germans tend to be methodical in their approach to lev technology development, the French were much more experimental. According to the foreign-service operatives who were able to work near the facilities, some of the early designs of their ships were comical. In retrospect, however, the French were learning valuable lessons in ship design and application. Rumors have abounded that the French still maintain a fleet of their prototypes, outfitted for special roles or missions in time of war. Some of their ships are rigged solely to transport troops and artillery, helping define their role in support of ground combat.

Historians have referred to this period as the Great Sky Race, where each major power sought to find new ways to exploit this technology to create their own fleets of levs. The emergence of the French lev fleet, the *Flotte de Volée,* was a byproduct of the great sky race.

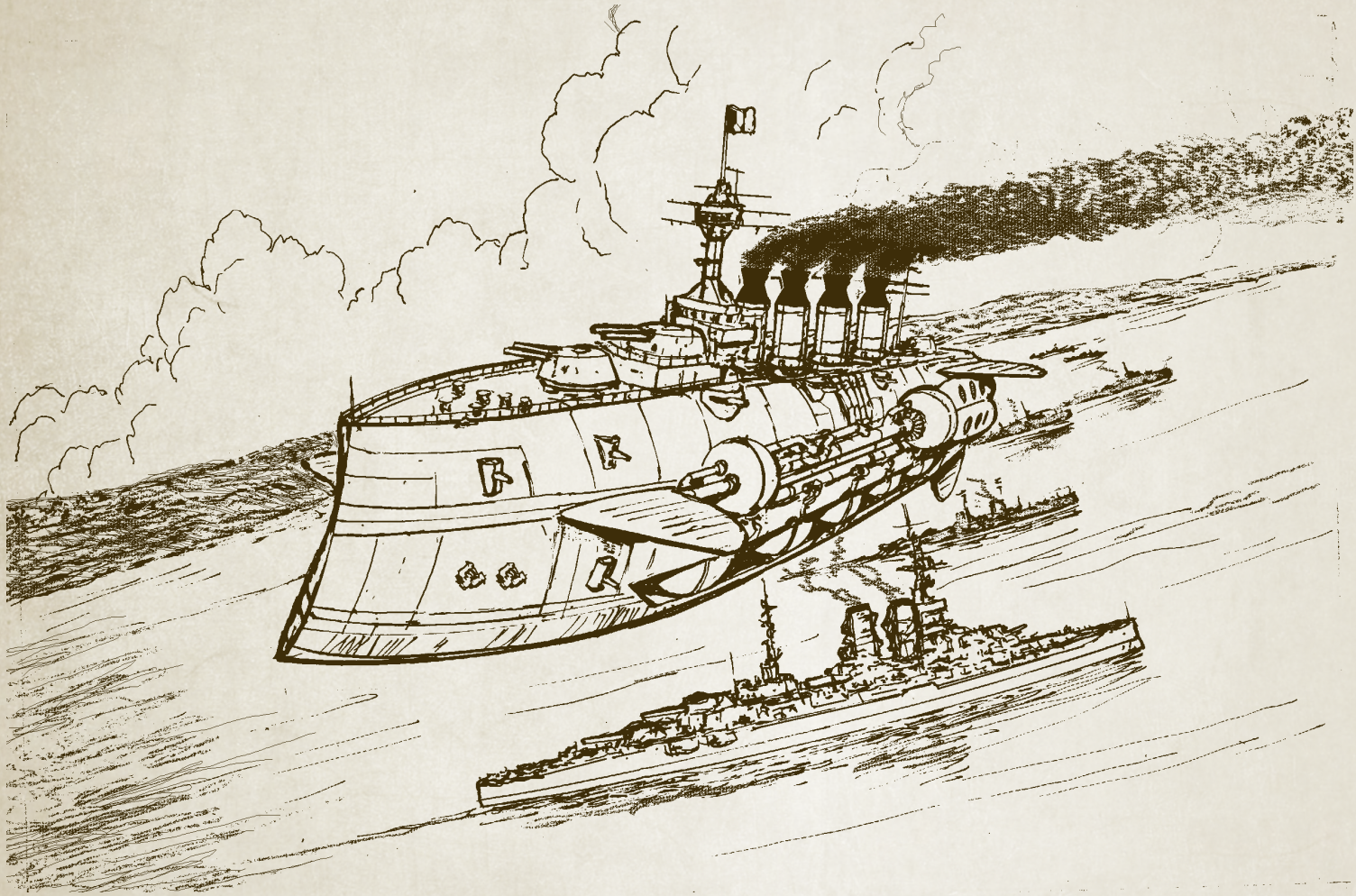
### Georges Benjamin Clemenceau

*The French Prime Minister is known as "le Tigre" for the manner in which he uses his political power. Clemenceau rose to power on a platform of "France First and Always!" He has seen Ganys as the means for France to reassert itself on the world stage. Of all of the power brokers in France, Clemenceau has demonstrated an understanding that Gany technology allows for a change in the balance of power that Britain has managed to keep in check for years. Most see Clemenceau as a diplomatically dangerous foe who can destabilize Europe—moreover, he's willing to do so.*

*The Prime Minister is so enamored with the great flying warships he personally has called for the creation of a squadron named "Les Tigres," in tribute to their benefactor.*

There are subtle differences in how we view our airships, perhaps the least significant being that they refer to their ships as *Ganys* rather than levs.

The French suffered the loss of one of their levs in a crash landing, the cruiser *Rousseau*, during maneuvers on 20 June 1892 near the Alsace-Lorraine border. There were French accusations that a nearby German artillery unit may have had some complicity in the matter, even going so far as to hint that some sort of new weapon must have been used to down the ship. The Germans denied the allegations but the French used it to justify maintaining a fleet on permanent patrol in the region. This deft political maneuvering around



# FRENCH LEVIATHAN RANKS

***OFFICER RANKS (TRANSLATION/EQUIVALENCY)***

*Admiral aérien*
(Admiral of the Air/Sky Admiral)

*Commandant aérien*
(Commander of the Air/Sky Rear-Admiral)

*Capitaine aérien*
(Captain of the Air/Sky Captain)

*Lieutenant aérien*
(Lieutenant of the Air/Sky Commander)

*Sous-Lieutenant aérien*
(Second Lieutenant of the Air/Lieutenant Commander)

*Enseigne aérien*
(Ensign of the Air/Lieutenant)

*Enseigne aérien 2ème classe*
(Ensign of the Air Second Class/Ensign)

***ENLISTED RANKS (TRANSLATION/EQUIVALENCY)***

*Maître-principal*
(Principal Master/Chief Petty Officer)

*Premier-maître*
(First Master/ Petty Officer)

*Maître*
(Master/Leading Airman)

*Second-maître*
(Master 2nd Class/-)

*Quartier-maître 1ère classe*
(Quarter Master First Class/Able Airman)

*Quartier-maître 2ème classe*
(Quarter Master Second Class/-)

*Aviateur*
(Airman/Airman)

the use of their lev fleet was to be a hallmark of French dealings during the period of the Great Sky Race. Then and now, they use their levs as a means of pushing through diplomatic change.

## THE PRIDE OF THE NATION

France felt that it had been grievously insulted by the Germans during the Franco-Prussian War and dominated by the United Kingdom's wet navy for years. The development of lev technology presented the French with a way to dramatically shift the balance of power. Their *Flotte de Volée* became a matter of incredible national pride.

In order to ensure that the resources emerging with the air fleet were effective, they established the prestigious *École d'Aviation*, the Aviation School, at Le Bourget field. Their officers are trained a full year longer than our own, which is something that deserves further investigation.

The wreck of the *Rousseau* was towed back to Grenoble and repaired, so that it was converted into a training ship. Every student at the *École d'Aviation* does two summers of service aboard the *Rousseau,* culminating in a final flight along the Channel coast. Based on this extensive training, our own foreign service agents inform us that the French navy may yet indeed be a potent threat to our own navy, and their capabilities cannot be discounted or overlooked.

## LIBERTÉ, EGALITÉ, FRATERNITÉ: THE COLONIAL LAND GRAB

Africa represented a luscious fruit ripe for the picking by both France and the United Kingdom, and as such, clashes were destined to occur. Beginning in 1892, France set her sights on northern and central Africa. The French used their levs in two primary roles during the period known as the Colonial Landgrab: as support for ground troops in a bombardment capacity, and for transport of troops, supplies and heavy artillery that otherwise might have taken months to move cross-country. Troops were crammed into any available space, making such transports distasteful, to say the least.

This bold and open use of their leviathans was demonstrated in the African coastal enclave now known as French Somaliland. The local warlords were well armed and prepared to resist French attempts to secure the region. France's response was to deploy the battleship *Henri IV,* which was used to shell the defense trenches dug by the locals. The *Henri IV* landed inside their lines, disgorging a Foreign Legion force along with supporting artillery. The locals did not stand a chance.

In Algeria, when local tribesmen rebelled in the southern regions, the destroyer *Bisson* was dispatched. Several encampments were blasted by the *Bisson*'s guns and it used smaller lev platforms to land a contingent of cuirassiers to mop up any survivors. The smaller "landing craft" used to bring in the cuirassiers demonstrates a troublesome development, since it could be a prelude to ships that could land troops on our own home islands. The French presence in Tunisia and Algiers placed them precariously close to the British Suez region in Egypt. The creation of a permanent refueling station on the North African coast was seen as a clear indication that any future conflicts in the region were going to involve the use of levs.

The control of central Africa proved to be the boiling point between the British and the French. Control of this region would help determine the future control of Africa as a whole.

# THE FASHODA INCIDENT

By the summer of 1898 it was clear that the area known as the Sudan was going to be critical to the control of central Africa. Two years earlier, Lord Kitchener secured much of the region from the locals—though the French did not acknowledge the British claims to the area. If the French held the territory in strength, it could potentially cut off the South African holdings of the British Empire.

Somehow the French learned of the military expedition being formed by Lord Kitchener which planned on using gunboats to secure the small fort of Fashoda on the banks of the White Nile. Lord Kitchener was using the HML *Achilles* to support his ground and naval presence in the region.

The French expedition under Jean-Baptiste Marchand intended to seize Fashoda as well, and knew they were going to be arriving late. *Capitaine aérien* Jean-Paul Martel commanded the battleship *Dunquerque* and was placed in charge of moving the Marchand expedition into place. On 10 July 1898 the French battleship arrived and found the British garrison in place; the *Achilles* was on patrol a half-day away.

Major Marchand unloaded his troops and a number of new fast-fire artillery pieces for a siege of the fort at Fashoda. The *Achilles* came back from its patrol and leapt into the fray. The battle on the ground and in the skies lasted for hours and ended up with the *Achilles* withdrawing with damaged steering gear, a move interpreted as a retreat by even Lord Kitchener in his confidential report of the battle. The *Dunquerque* was believed to be badly damaged and indeed, the mangling of her bow has become something of a matter of pride for the French.

In the press, the Fashoda incident was an incredible boost to French esteem and morale; but while the French held the field, it was hardly a decisive victory. Lord Kitchener was able to rally his command and launch an attack which regained part of the fort; *Capitaine aérien* Martel did not provide additional fire support out of fear of hitting his own troops.

The diplomats, in a rush to avoid all-out war, left the area of the Sudan under split control, leaving the future of Africa somewhat up in the air. Neither side got what they wanted, though Lord Kitchener was given the honor of garrisoning the ruined fort at Fashoda. The French built a new fort further upriver which was heavily garrisoned, forcing an equal commitment of British troops.

The French used the experience to their full advantage. The officers of the *Dunquerque* taught courses to their peers and students at the *École d'Aviation* using the Fashoda action as an example of how to achieve a goal with lev power. The Fashoda incident better prepared the French for a future war with the United Kingdom.

# THE CHANNEL CLASHES

The English Channel was the most logical place for potential conflict. British Prime Minister Arthur Balfour in the spring of 1903 issued a declaration known as the Salisbury Doctrine. This doctrine claimed that the skies over the English Channel were considered to be the purview of the United Kingdom. It was a bold move aimed at keeping the French at arm's length, but it was a challenge the French could hardly ignore.

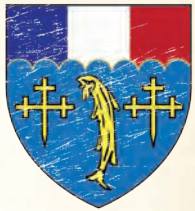
The French Channel Squadron, known as *Les Cigognes* (The Storks) did not feel compelled to acknowledge the Doctrine. On several occasions the *Cigognes* flew over the channel waters in plain view of the Royal Navy, attempting to goad us into conflict. On 25 May 1903 the *Cigogne* squadron was on patrol over the channel when it was confronted by the British Channel squadron.

The British squadron, under the command of Air Commodore Harrison, moved to block the flight path of the

*Cigognes*. The French swung out further into the channel, actually making the incident even more flagrant. Shots were fired by the HML *Ajax* across the lead ship of the *Cigognes*, the *Charlemagne*. The *Charlemagne* responded by firing shots over the bow of the *Ajax* and running up her battle flags. Action commenced but was halted after fifteen minutes when a sudden squall came in, forcing disengagement. While the press may claim it was our victory, those of us who were there know differently. The loss of more than five hundred fifty men in just a few minutes was a clue as to how costly the next war was going to be.

Protests were filed in both embassies and the matter was placed in the hands of diplomats to resolve. A return to antebellum was the result. To this day when the two channel squadrons pass near each other, the tension is palatable.

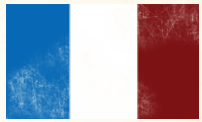
### MEUSE



Based in North Africa as part of the Mediterranean squadron, the *Meuse* is a fast destroyer that was commissioned in 1905. The *Meuse* patrols along the border between Tunisia and Egypt down to the contingent in the Sudan. Unlike many ships assigned to squadrons, the *Meuse* often is seen operating alone, without support. Given her renowned speed, she is alleged to be designed to outmaneuver an enemy rather than slugging it out in a battle.

The *Meuse*'s captain, *Capitaine aérien* André Fallon, is a known rising star in the field of French air flight. At the age of 30, he is the youngest officer to command a lev in France. He is also said to be highly aggressive and capable of getting his ship and crew to perform maneuvers that could be considered reckless.

### COMMANDANT AÉRIEN JACQUES DAVIES



The commanding officer of the *Cigognes* squadron of the English Channel, Commandant Davies is the man on the front line of any conflict with the United Kingdom. He is a product of the *École d'Aviation* and is recognized as an up-and-coming officer. It is said that in his youth, while attending the *École d'Aviation*, he heard a young woman scream. Davies rushed out to help her and was confronted by a street gang. Davies did not hesitate to attack them despite the odds. He came out of the fight barely conscious, having had a bottle of wine shattered over his head in the melee. As he tells the story, he did manage to not only save the young woman in distress, but he eventually married her. This offers a glimpse into his character and the way he thinks.

What makes Jacques Davies a dangerous foe is that he has trained the *Cigognes* to work and fight as a squadron. He orchestrates the squadron's movements and gunnery targets so that rather than fighting ship against ship, his entire squadron fights as a cohesive unit.

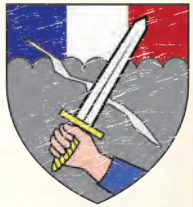
## COMMANDANT AÉRIEN JEAN-PAUL MARTEL

Born in Rembercourt, Jean-Paul Martel began his career in the French navy and transferred to the *Flotte de Volée* early in his career. Martel proved to be a good leader and eventually worked his way up to command the *Dunquerque* after three years of commanding the light cruiser Gazelle. His actions during the Fashoda Incident put him on the national stage, and he soon was the poster boy for recruiting efforts. His nickname, an homage to the Frankish military leader Charles Martel, is the "The Sky Hammer."

Martel accepted promotion but insisted that he retain command of the *Dunquerque*. His last active duty was against the German ship *Kaiserin*. After that engagement he was promoted to command the entire *Flotte de Volée*. Most observers take this as a sign that the French are no longer promoting old men or those in political favor ... a dangerous trend indeed.

Martel is said to be innovative. He has enlisted the aid of several pilots currently experimenting with fixed-wing aircraft, including Gabriel Voisin and Louis Blériot. The exact purpose of Martel's interest in this technology is not known. Operatives in the foreign service say that the battle against the *Kaiserin* convinced the vice-admiral that he could better serve his country in a leadership capacity. But if sources are to be believed, he will attempt to be on the bridge of a ship at time of war in order to settle the score against the *Kaiserin*.

## DUNQUERQUE



The *Dunquerque* is an icon of the French *Flotte de Volée* after her actions in the Fashoda Incident. The prow of the *Dunquerque* was badly damaged in the fight with the *Achilles* and was repaired. The results of the repair left a discernable welding scar from her deck down to her electroid tanks. The navy chose to leave the mark on the prow and fondly refer to it as "the scar." Cadets from the *École d'Aviation* are said to be blessed with good luck if they touch the welding mark on the prow of the *Dunquerque* and groups of cadets often make the pilgrimage when the *Dunquerque* lands in their port.

On 16 December 1907 the German battleship *Kaiserin* squared off against the *Dunquerque* over the village of Zabern. The Germans opened fire on the *Dunquerque*, allegedly mistaking a lit cigarette on the deck for a muzzle flash. The *Kaiserin* managed to force the *Dunquerque* off.

*Regardless of individual engagement results, the Dunquerque is the most battle-tested lev in the world.*

# SONS OF TSUSHIMA

## PRELUDE TO DEFEAT

The Japanese victory in the Sino-Japanese War of 1894–95 left them the undisputed rulers of the East, a situation other European powers were unwilling to let stand. Hence, after signing the Treaty of Shimonoseki a mere six days earlier, the Japanese found themselves the target of diplomatic pressure from several European powers which ultimately forced the Japanese to give up the recently gained Liaotung Peninsula in exchange for a few concessions. Now, it can be argued as to why the English and French supported the Russians' diplomatic offensive, but the ultimate outcome was that the Japanese were ejected from Manchuria—much to Japan's consternation, the Russians now occupy that territory.

> For a nation so enraptured with the concept of honor, the Japanese, rather surprisingly, have not let the far-reaching defeat at Tsushima deter them from their territorial ambitions or their pursuit of leviathan technology.
>
> It is our misfortune, however, that they have strengthened their ties with the Hun and cast aside the helping hand we once offered them.

Unable to resist the combined might of the three powers with its military, the Japanese deferred and accepted the outcome—for the moment. Incensed at the Russians, the Japanese immediately put into action a plan of rapid expansion to match the military might of the European power. In 1895, the Japanese embarked on a massive increase in the size of its naval fleet, placing several orders with the Vickers shipyard at Portsmouth. Due to the Royal Navy's interest in leviathan technology and the subsequent rise to power of Sir Jackie Fisher, ships that had been initially slated to serve under the white ensign were now placed on the auctioneer's block to cover the exorbitant expense of the initial leviathans. Japan acquired its new ships almost immediately.

Seemingly overnight, the Japanese fleet took its new shape, centered around the *Majestic*-class *Mikasa*, the first of its class. That it went to a foreign power registered as yet another Fisher-generated insult against the Royal Navy. Initially slated to serve as the newest warship class under the abandoned Spencer Program, the *Majestic*-class was to be the new standard for Royal Navy battleships. It's acquisition by the Japanese left a sour taste in the mouth of many in the Admiralty. The Japanese, however, were quite happy with their purchase, and used the ties they had forged with the Germans to acquire the new Krupp armor to replace the now-obsolete Harvey armor; an errand that required a stopover in Bremen and occasioned a chance meeting that would have far-reaching consequences.

# TOGO AND MECKEL

It was in Bremen that General Jakob Meckel, a German staff officer who had served as an adviser to the Japanese Army before the Sino-Japanese War, met young Captain Togo Heihachiro. Togo had been selected by the Japanese Admiralty to accompany the as-yet-unnamed *Mikasa*-class and oversee the re-armoring process at the Bremen shipyard. He was chosen for this task as a result of his masterful handling of a potentially disastrous diplomatic incident during the Sino-Japanese War; it was hoped his tact would expedite the process, as well as help develop closer ties to the Germans, who had been quite generous despite their involvement in the Triple Intervention.

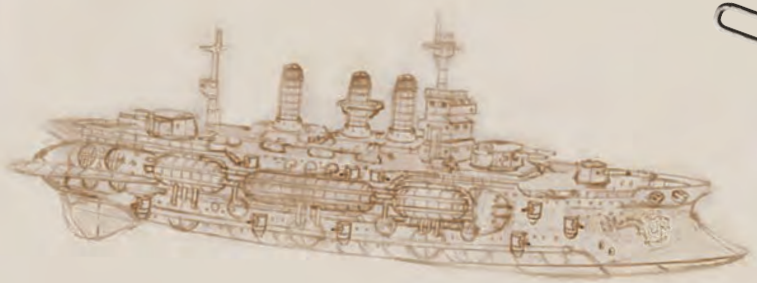
Meckel had just been selected to return to Japan to advise the Imperial Army on tactics relating to the Russians and the deployment of the latest German weaponry. In reality, his mission was twofold—develop closer ties with the Japanese and, more importantly, watch over the Russian Marshal Skobelev and his so-called "Falcon's Nest" under construction in the Amur Province. Skobelev's involvement with the Russian leviathan program was seen as relatively unimportant, but the Russian officer's dislike for the German nation was well known. With Germany's colonial ambitions burgeoning, the general staff felt it prudent to keep an eye on the "Father of the *Berkuts*" and make sure his antipathy toward Germany did not threaten their Eastern holdings. Meckel was to accompany Togo aboard the *Mikasa* as a passenger on its voyage to Japan.

It was during this time together that Togo and Meckel each developed a healthy respect for the other's talents. One was an experienced officer in land warfare, and the other had a comprehensive grasp of naval tactics. During the voyage from Bremen to Hokkaido, the two officers discussed the

*Iwasaki Hisaya*

*Son of Japanese businessman Iwasaki Yataro, Hisaya is the current president of Mitsubishi Goshi Kaisha (Mitsubishi Shipyard), one of the largest suppliers of naval logistics in Japan. Having only recently replaced his deceased uncle as president, Hisaya has struggled to come out from the shadow of his father. To this end he has thrown himself behind the new air service, completely overhauling the shipyard at Nagasaki to accommodate the new Hayabusa Ryoushi-class vessels ordered by the Japanese air service.*

*Hisaya is also one of a few Japanese who are willing to deal with the Tsushima-baka. His position in society ensures that this does not reflect badly on him; Hisaya feels that the experience of those officers who survived Tsushima will allow him to create something that will not only give his nation back its pride, but also ensure that his legacy is equal to that of his father's. The success or failure of the Hayabusa will determine not only Mitsubishi's future, but his own as well, and to this end he has made sure that his influence extends far and wide amongst the fliers of Japan.*



*Japanese Battleship, name and class unknown*

advent of the leviathans and what impact, if any, it would have on the battlefields of the day. Despite his kaiser's dislike for leviathans, Meckel himself felt undecided about the development, whereas Togo was reportedly openly dismissive of the leviathans' abilities. Upon their arrival in Japan in early 1896, Togo was promoted to rear-admiral and assigned to a position at the Japanese Naval War College, through which he was able to maintain close contact with the German adviser.

## THE RUSSO-JAPANESE WAR

Every Royal Navy officer should by now know in excruciating detail the circumstances of the defeat of Admiral Togo's armada at the Battle of Tsushima. But the lead-up to that fateful event is seen more as the purview of the Army than that of the Sky Fleet. Indeed, the early actions of the war were mainly land-based assaults, the one notable exception being the defeat of the Russian Pacific squadron as it tried to break the blockade of Port Arthur. But it was the Japanese reaction to the *Rairyuuha*, or "Thunder Dragons," as the Russian *Berkut*-class vessels came to be known, that laid the groundwork for the defeat at Tsushima.

When the Russians retook Port Arthur in July 1896, it was the Russian leviathans that made it possible and provided the first glimpse of the weakness that would ultimately undo the Japanese. Because the Japanese guns were unable to elevate high enough to engage the Russian flyers, General Tomav's forces inflicted grievous casualties. Upon learning of this limitation to their armament, the Imperial Japanese Army turned to Jakob Meckel for assistance. The Germans' largesse with military equipment had proven decisive in the land battle, and it was hoped their experience with the flyers would give the Japanese fleet the edge over the Thunder Dragons. Meckel's immediate advice was to replace the current Japanese naval commander with an officer who had studied anti-leviathan tactics and would be able to counter them. As a result of this recommendation, Admiral Togo Heihachiro was given overall command of the Japanese fleet and ordered to strike down the enemy leviathan force. But while Togo was a comrade-in-arms of the German officer, he was also a product of the British naval education system, and shared all the biases towards leviathans that the Admiralty continues to exhibit to this day.

The ultimate outcome of Tsushima is a matter of record; despite his eventual defeat, Togo achieved several victories against individual *Berkut*-class vessels, and was honored by the Japanese Navy for those actions. Indeed, until his death onboard the stricken *Mikasa*, Togo was acknowledged by multiple sources as the foremost practitioner of anti-leviathan warfare.

## AFTERMATH OF DEFEAT

In hindsight, the Japanese reaction to the defeat at Tsushima may be seen as excessive, but at the time, after having their victorious (and extremely expensive!) fleet humbled by the Russian "toys," it is easy to understand the vehemence of their reaction. The first to feel their wrath was the British shipbuilding industry, from which they withdrew several large orders; British equipment was targeted as the reason for the defeat. The next scapegoat was Meckel, who was declared *persona non grata* and deported from the country. Admiral Togo had conveniently got himself killed, so he was an appropriate martyr to the cause. The most critical blow was that Japanese territorial ambitions had been severely stymied.

# IMPERIAL JAPANESE LEVIATHAN RANKS

***OFFICER RANKS (TRANSLATION/EQUIVALENCY)***

*Tai-sho*
(Naval General/Sky Admiral)
*Chu-sho*
(Naval Lieutenant-General/Sky Rear-Admiral)
*Sho-sho*
(Naval Major-General/--)
*Tai-sa*
(Naval Colonel/Sky Captain)
*Chu-sa*
(Naval Lieutenant-Colonel/Sky Commander)
*Sho-sa*
(Naval Major/ --)
*Tai-i*
(Naval Captain/Lieutenant Commander)
*Chu-i*
(Naval First Lieutenant/Lieutenant)
*Sho-i*
(Naval Second Lieutenant/Ensign)

***ENLISTED RANKS (TRANSLATION/EQUIVALENCY)***

*Joto Koku Heiso*
(Air Chief Petty Officer/Chief Petty Officer)
*Itto Koku Heiso*
(Air Petty Officer First Class/Petty Officer)
*Nito Koku Heiso*
(Air Petty Officer Second Class/Leading Airman)
*Santo Koku Heiso*
(Air Petty Officer Third Class/--)
*Itto Koku Hei*
(Airman First Class/Able Airman)
*Nito Koku Hei*
(Airman Second Class/--)
*Santo Koku Hei*
(Airman Third Class/Airman)

Emboldened by victory, the Russians demanded the Japanese sign the outrageous Treaty of Mukden, which required Japan to cede territorial rights on Sakhalin to the Russians and make significant reparations. As a direct result the Japanese have become increasingly insular, but it is increasingly apparent that they are determined to assuage the embarrassment of Tsushima by defeating the Russians, and asserting once and for all their dominance of the Far East.

To this end, the Japanese government has again recently embarked on an expansion program, this time based on the leviathans that proved so instrumental in their humiliation at Tsushima. After alienating both the British and the Germans, and with no love for the French after their involvement in the Treaty of Shimonoseki, the Japanese turned to the Americans for assistance in developing their own *Rairyuuha* fleet.

## RISE OF THE RAIRYUUHA

As with the Russian leviathans, and perhaps as a result of the defeat at Tsushima, the Japanese leviathan fleet, based largely on modified U.S.-provided *Cleveland*-class cruisers (the extent of the modifications is unknown, though certainly the Americans would be unwilling to give another nation a complete vessel), comes under the oversight of the Imperial Japanese Army. Whilst like the Russians, most recruits have come from the Navy, the stigma associated with the Tsushima defeat has encouraged many naval officers make the move across to what is seen as the "untarnished" service.

What we currently know about the Japanese leviathan fleet is extremely limited. Several of the vessels purchased in 1895 that survived Tsushima were salvaged for parts and gun mounts. With the first *Kuroraikou*-class (Black Lightning) armored cruisers being deployed in 1905, the Japanese are well behind the curve when it comes to the flyers; but given their history of military expansionism and their preoccupation with striking back at the Russians, it is safe to assume that they have learnt the lessons of Tsushima.

Unwilling to lose influence in this critical region, the Foreign Office has begun a diplomatic offensive to charm the Japanese in order to secure a more favorable trade position. With the French port of Saigon and German base at Tsingtao within striking distance of the Empire's eastern holdings, the Admiralty has agitated for an increased program of technical support and technology transfer for the Japanese fleet.

The recent deployment of the Russian Pacific Fleet based out of the "Falcon's Nest" fortuitously led to a significant faction within the Japanese government warming to the idea of cooperation with their traditional allies, particularly when Vickers corporation announced that it would back the development of a new graving yard, built to the very latest specifications, on the main island of Honshu. The presence of advisors from the United States remains a sticking point for the Japanese; the colonials are understandably unwilling to expose their own involvement to British scrutiny, but the generous offer, tied to long-held bonds of fraternal friendship, appears to be swaying public opinion.

### *TAI-SA* KUSUNAGI SADO

One of Togo's former students, Kusunagi was present at the defeat of the Japanese fleet at Tsushima, albeit strapped to a bed on a hospital ship. One of the casualties during the evacuation of Port Arthur in 1896, Kusunagi would return to a Japan humbled by defeat and as a member of a service that brought shame on the nation. Unlike several of his comrades, Kusunagi did not commit *seppuku*, and remained with the Imperial Navy, which was a shattered shell of its former glory.

So in 1905 when the opportunity arose, he was one of the first of the *Tsushima-baka* (as the officers who survived Tsushima and chose not to commit seppuku were called) to migrate to the new service. A former captain in the Navy, Kusunagi was given the rank of *Tai-sa*, and eventually command of the *Kuroraikou*-class *Kuroitsuki* (Black Moon). *Tai-sa* Kusunagi is being held up as the example of the rebirth of the Imperial Navy, and the rise of the *Rairyuuha*.

### HAYABUSA RYOUSHI


Its name translating as "Falcon Hunter," there is no mistaking the intent of this latest Japanese leviathan. The first Japanese vessel not to be built from American hulls, the *Hayabusa* is the prototype of a new class of leviathan specifically dedicated to hunting the Russian *Berkut*-class vessels that have been the mainstay of the Russian fleet for so long. To this end, it is equipped with larger-caliber weapons, seeming to forgo the smaller armament seen on most flying vessels.

Unlike the *Kuroraikou*-class vessels that make up the rest of the Japanese fleet, the *Hayabusa* borrows not only from the Americans, but from the Germans and French also, signifying a disturbing trend of close cooperation between the three nations. In any case, the *Hayabusa* remains unproven in combat, and the only time officers of the Admiralty should encounter one is from the bridge of a Russian flyer.

# KRIEGSSPIELE IN THE SKY

## AUFTRAGSTAKTIK IN THE SKY

What we know of the German leviathans is largely thanks to the spy August Bebel, who bravely supplied us with information regarding the Germans' military buildup from the time he realized the kaiser was mad with power.

Initially, German research into leviathan technology was limited to information gleaned from German spies obtaining copies of the Russian Shukov's research in 1885. Kaiser Wilhelm I, keen for any advancement in the field of battle, was particularly interested in Oblimovsky's research into *eteroid* (electroid) weapons. Detailing the respected scientist Ernst von Siemens to continue examining the properties of *eteroid*, the kaiser began discussing with the chief of the general staff how effective such weapons could be when deployed through Krupp's new 1000lb steel breechloaders.

The German program was stripped nearly to nothing when Wilhelm I died and was succeeded by his sickly son, Frederick III. The new kaiser had more pressing issues to deal with than newfangled technology and, despite Siemens' protests, allowed himself to be wooed by French promises of medicinal aid in return for the Germans' results. And so, with not a shot but a viperous whisper, the French got their hands on the secrets of the leviathans. Frederick III never saw the promised cure, dying a mere ninety-nine days after ascending the throne.

After the death of his father in 1888, Wilhelm II ascended to the position of kaiser, and his Prussian upbringing immediately shined through. Considering himself a man of the world, the kaiser had a keen interest in science and technology and was particularly interested in expanding upon the research that his father had allowed to fall into the hands of the French. But Kaiser Wilhelm II's plans were to torn asunder by two pivotal events in the following year.

## THE GREAT EXHIBITION AND FLEET REVIEW

The Germans were not present at the unveiling of the *Ganymède* and *Leviathan* during the Exhibition; from their perspective, they were preparing for a more auspicious occasion. While Kaiser Wilhelm II was curious about the

The Huns have been remarkably quiet about their own leviathans, and since the loss of our informant Bebel we have little insight into the workings of their minds. The period of stagnation after the loss of the Crown Prince has put them behind the rest of the pack, but they'll catch up damned quickly now they've put their minds to it.

concept of leviathans, he was under no misconceptions regarding the reality of their construction and manufacture. Wilhelm had come under the sway of the Admiral von Tirpitz, and it was no secret that the Imperial Navy—the *Kaiserliche Marine*—was the kaiser's preferred service.

Arriving in England for his grandmother Her Majesty Queen Victoria's birthday celebrations, the kaiser and von Tirpitz were keen to see for themselves the might of the Royal Navy at the traditional Fleet Review. When the commotion surrounding the unveiling of the first grand flyers moved attention to the newfangled contraptions hovering in the skies above London, the kaiser and his admiral nearly retired from their location at Spithead to see for themselves the new machines.

It was serendipitous that they remained to watch the review; not only was the kaiser awed by the size of the Royal Navy sailing through the Solent, he was also greeted by the sight of not one, but *three* of the new leviathan fliers brazenly flying in formation above the assembled fleet. Bebel's missives make it clear that it was at this point the kaiser's bold decision was made—von Tirpitz's plan would be changed. If the Germans could not challenge us on the sea, they would challenge us from the sky.

## THE TIRPITZ PLAN

Von Tirpitz's original plan was for a massive expansion of the German fleet, to such a level that it could match and defeat the Royal Navy if need be. Whilst defending the Fatherland from a Royal Navy blockade was the primary reason for the expansion, von Tirpitz was also concerned about expanding Germany's colonial holdings, thereby assuring that Germany would become a superpower on the world stage.

The revelation of the leviathans changed this thinking. Whilst von Tirpitz would still expand the Navy, he would also oversee the creation of a new arm of the German military—the *Kaiserliche Luftmarine*. Using von Siemens' work as a basis, the Germans turned their attention to creating the perfect military flier. They wanted nothing as simple as what the French or we had tried so far—the idea was to mount Krupp's 1000lb cannons on a sky platform that would allow the Germans to threaten the might of the Royal Navy no matter the numbers arrayed against them. Thus was built the SMS *Friedrich III*, the Germans' answer to the raft of fliers taking to the air in France and Britain. Four times as large as the *Leviathan*, she was built in secret outside of Potsdam, taking to the air, sans weapons and armor, for the first time in the spring of 1892.

## THE DEATH OF KRONPRINZ WILHELM

Kaiser Wilhelm II's respect for the Navy had been passed onto his son, *Kronprinz* Wilhelm. But the crown prince became enamored with the idea of flight and pressured his father to be allowed to see the nascent *Kaiserliche Luftmarine*. As befitted his royal status, Crown Prince Wilhelm, a bright young man of nine years, was brought to Potsdam to be aboard the *Kaiser Friedrich III* during its first live firing test. Occupying the captain's chair onboard the German flyer, the crown prince was excited to experience the marvelous sensation of flight.

On that day in 1893, the *Kaiser Friedrich III*, as befitted a great beast of its size, rose steadily until it held a distance of four fathoms above the ground. The utmost care had been taken to ensure that no spies had infiltrated the test area,

and with a flourish, the crown prince gave the order for the magnificent flier to open fire. What happened next comes to us from Bebel, and even from that impeccable source it is only hearsay.

The *Kaiser Friedrich III* opened fire with its twin 1000lb breechloaders, weapons that had served the Prussian military well on their 1871 drive on Paris. The side of the *Kaiser Friedrich III* disappeared amidst the smoke of the discharge, and soon it became apparent something was dreadfully wrong. The force of the back blast from the massive cannon had not been offset by the additional electroid tanks dotted around the *Kaiser Friedrich III*'s hull as expected, and the massive recoil had pitched the vessel on its flank. Crewmen were seen jumping to their deaths as the massive vessel careened into the hard-packed clay of the Potsdam proving grounds—but the deaths of a few naval personnel were nothing compared to the loss of the kaiser's heir.

Immediately the grief-stricken kaiser suspended the leviathan program, declaring it "a fool's errand" and disbanding the *Kaiserliche Luftmarine*. The crews in training were returned to the Imperial Navy, and the monies devoted to the development of levs was promised to Admiral von Tirpitz to expand the *Kaiserliche Marine,* with special emphasis on grand battleships that would embarrass the Royal Navy at Queen Victoria's Diamond Jubilee.

## MECKEL AND THE JAPANESE

With the death of Crown Prince Wilhelm and the subsequent disbanding of the *Kaiserliche Luftmarine*, the German leviathan program stagnated, despite the advances that both we and the French were making with our own programs, and the rumblings coming out of Imperial Russia regarding the "Rise of the Falcons." Admiral von Tirpitz was happy to be spending the money on expanding the German fleet, and the kaiser was not open to suggestions of reactivating the program.

After the brusque and inflammatory outburst of Marshal Mikhail Skobelev in Paris in 1882, the German foreign secretariat kept a close watch on the Russian's career. Learning of his deployment to the Liaotung Peninsula

### Dr. Ernst Schmidt

A professor of Chemical Engineering at the Hahn-Meiter Institut, Schmidt is the protégé of Ernst Werner von Siemens, serving as von Siemens' assistant during the first electroid experiments at Potsdam and, since Siemen's death, as the head technical adviser to the *Kaiserliche Luftmarine*. As such, Schmidt has overseen the development and production of every class of vessel in the German air service, operating from the newly constructed (and if August Bebel was to be believed, extremely well-funded) Siemens Wing of the Institut.

Schmidt came to worldwide attention during the ill-fated 1910 Race to the Pole, where he captained the German entry, the SMS *Flugboot*. Despite the contest's disastrous end and the subsequent controversy surrounding the German crew's survival, Schmidt has suffered no censure, and if anything is held in higher regard within the *Luftmarine* circle. The Siemens Wing has flourished, drawing in droves new officers from the *Luftkriegsakademie* to Berlin to learn the intricacies of leviathan technology.

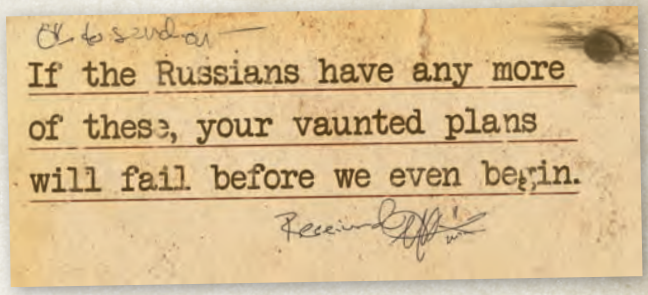
The unspecified reports of the contents of the latest paper presented by Schmidt are worrying, however. Initially published in the public domain, Admiral Tirpitz quickly ordered it removed from circulation and pronounced it "Top Secret." All that is known is that Schmidt was working with a scientist named Roentgen.

in China, Chief of the General Staff General Count von Schiefflen saw a way of distracting the Russians whilst the German army continued its buildup for war. The Japanese, incensed at the so-called "Triple Intervention," ordered more German military supplies to bolster their army. Von Schiefflen agreed to their request, and as a show of good faith, sent General Jakob Meckel to oversee the transfer of goods.

Meckel was no stranger to Japan, having served as the German military adviser there from 1885 to 1890, and was seen by the Japanese as instrumental in their success during the Sino-Japanese War. More as a sop to von Schiefflen than a serious educational attempt, in mid-1895 Meckel gave the Japanese staff officers a series of lectures on the Siege of Sebastopol, and the bright Imperial Japanese officers soon saw a correlation between the Russians at Sebastopol, and the Russians currently occupying Port Arthur and the rest of the Liaotung Peninsula.

Regardless of his role in prompting the Japanese Army's perspective on the Russian occupiers, Meckel was apparently caught unawares when the Japanese moved against Port Arthur and Vladivostok. Despite the keen interest that the Germans had in the outcome of the fighting, Meckel played the role of observer, making only a few small suggestions. Meckel was impressed with the Japanese navy, particularly its officer corps, and relayed his admiration to Berlin. Von Tirpitz, agitating for more funding for his expanded fleet, used Meckel's telegram as a means to quiet the military officers who were questioning the amount of funds being spent on the navy.

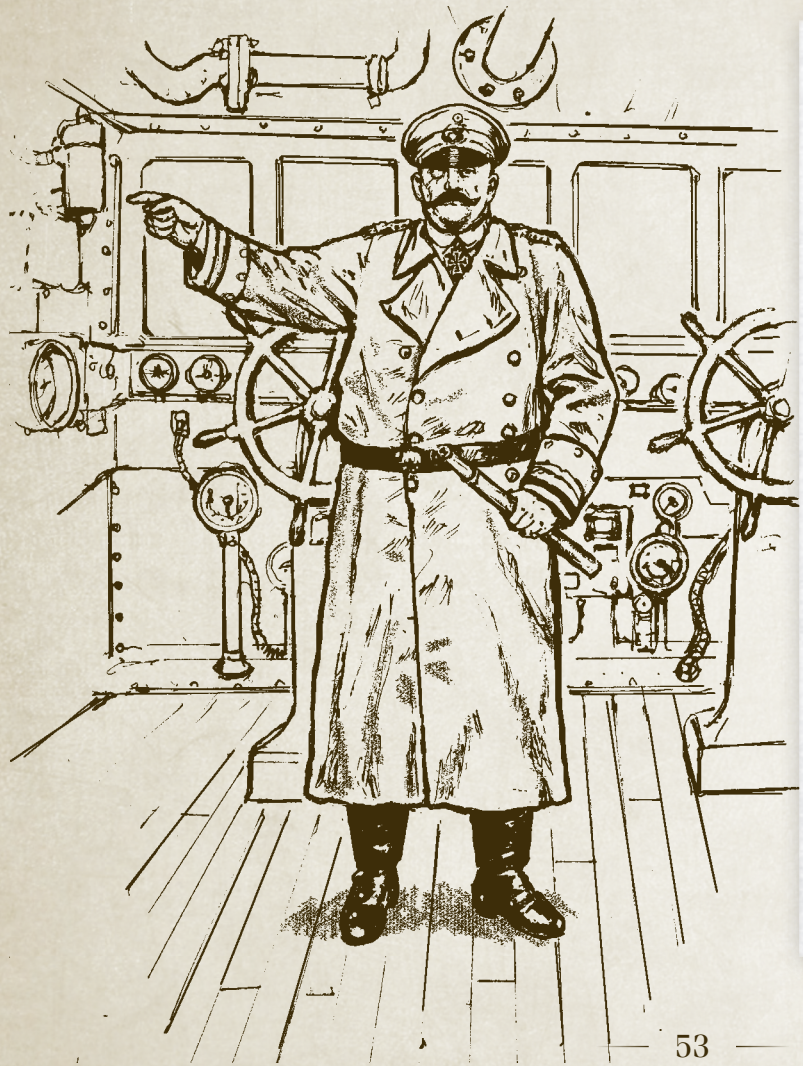
Soon, however, Meckel's admiration for the Japanese fleet was replaced with awe at the efficacy of the Russian leviathans arrayed against the Japanese infantry surrounding the Russian fortresses. When the *Alexander Nevsky* scoured the artillery batteries surrounding Port Arthur, Meckel sent the following cable to von Schiefflen;


If the Russians have any more of these, your vaunted plans will fail before we even begin.

Dismissing Meckel's assertion regarding the primacy of the leviathans, von Schiefflen ordered Meckel to concentrate on the Japanese and Russian fleets. The leviathans were a fool's errand—so the kaiser had stated—and von Tirpitz's fleet would at the very least need to supersede the Russians. So when news of Tsushima reached the general staff, von Schiefflen was in a quandary. The kaiser had made it clear that the leviathan program was a nonstarter, but the Russians had just shown how potentially ineffective even von Tirpitz's vaunted fleet might be.

In the end, he reached a compromise. Meckel was called back from Japan, and along with von Siemens was ordered to create a series of war games, or *kriegsspiele*, to train the officers of the Army and Navy in how to fight the new threat. For the moment, the Germans were out of the Great Sky Race.

*Ha! The Japs kicked him out!*



# IMPERIAL GERMAN LEVIATHAN RANKS

***OFFICER RANKS (TRANSLATION/EQUIVALENCY)***

*Admiral zur Luft*
(Admiral of the Air/Sky Admiral)
*Vizeadmiral zur Luft*
(Vice-Admiral of the Air/-)
*Konteradmiral zur Luft*
(Rear-Admiral of the Air/Sky Rear-Admiral)
*Kapitän zur Luft*
(Captain of the Air/Sky Captain)
*Luftfregattenkapitän*
(Air Frigate Captain/-)
*Luftkorvettenkapitän*
(Air Corvette Captain/Sky Commander)
*Oberleutnant zur Luft*
(First Lieutenant of the Air/Lieutenant Commander)
*Leutnant zur Luft*
(Lieutenant of the Air/Lieutenant)
*Oberdeckoffizier*
(First Deck Officer/-)
*Deckoffizier*
(Deck Officer/Ensign)

***ENLISTED RANKS (TRANSLATION/EQUIVALENCY)***

*Feldwebel zur Luft*
(Sergeant of the Air/-)
*Vize-Feldwebel zur Luft*
(Vice-Sergeant of the Air/-)
*Oberluftmaat*
(Chief Petty Officer of the Air/Chief Petty Officer)
*Luftmaat*
(Petty Officer of the Air/Petty Officer)
*Luftgefreiter*
(Private of the Air/Leading Airman)
*Oberluftmatrose*
(Airman 1st Class of the Air/Able Airman)
*Luftmatrose*
(Airman 2nd Class of the Air/Airman)

## KAISERLICHE LUFTMARINE, AGAIN

Ironically, it was the same event that had so inspired him initially that moved the kaiser to give his blessing to the leviathan program again. Accompanying him to the 1899 Fleet Review at the Solent was Admiral von Tirpitz and the German Squadron, a flotilla of vessels detached from the *Kaiserliche Marine*—a show of force designed to show us the pride of German engineering and military strength. However, the German fleet, far from demonstrating German technological superiority, compared unfavorably with their Royal Navy counterparts, and the absence of any form of German flier was noted when the skies above Spithead were filled with multiple British leviathans of various design.

Embarrassed by the poor showing of the German fleet, the kaiser again ordered von Tirpitz to develop a leviathan force. When von Tirpitz faltered in his response, von Schiefflen quietly mentioned that the Army was working on its own leviathan program and was positioned to begin production immediately. The kaiser paused and shook his head, and then turned to von Tirpitz.

*"I will have no mistakes like last time—we will take our time. You promised me a fleet, Admiral: I want it to darken the sky."*

As soon as von Tirpitz learned of Meckel's and von Siemens' studies, he assimilated their work into his own design bureau. Unlike us and the French, the Germans concentrated primarily on research and development rather than expanding their fleet.

## THE LOSS OF BEBEL AND THE FUTURE

*a true hero*

Unfortunately, the vast majority of our information regarding the Germans was cut off in 1905 when the Germans discovered that August Bebel had been feeding us information for years regarding both the Germans' naval and leviathan buildups. Since that time we have seen a steady stream of German leviathans being deployed around the world, but nothing approaching the numbers sported by the Sky Fleet, or even the French and Russians. What is most concerning to the Admiralty is the amount of funding von Tirpitz apparently continues to devote to the development of leviathan technology. We know from Bebel how much von Tirpitz had pledged to build his "Fleet in Being"; it has become increasingly apparent that the German shipbuilding has stagnated, but the funding has not been reduced by one shilling. Where is all that money going, and what are the Germans doing with it?

For the meantime, contact with the Germans warrants caution, but apart from a few minor skirmishes over the Pacific colonies the Sky Fleet has had little to do with them. As far as we can tell, neither have the French—though it is doubtful they would let us know either way.