chapter 1

The order to abandon ship was given at 5 P.M. For most of the men, however, no order was needed because by then everybody knew that the ship was done and that it was time to give up trying to save her. There was no show of fear or even apprehension. They had fought unceasingly for three days and they had lost. They accepted their defeat almost apathetically. They were simply too tired to care.

Frank Wild, the second-in-command, made his way forward along the buckling deck to the crew's quarters. There, two seamen, Walter How and William Bakewell, were lying in the lower bunks. Both were very nearly exhausted from almost three days at the pumps; yet they were unable to sleep because of the sounds the ship was making.

She was being crushed. Not all at once, but slowly, a little at a time. The pressure of ten million tons of ice was driving in against her sides. And dying as she was, she cried in agony. Her frames and planking, her immense timbers, many of them almost a foot thick, screamed as the killing pressure mounted. And when her timbers could no longer stand the strain, they broke with a report like artillery fire.

Most of the forecastle beams had already gone earlier in the

day, and the deck was heaved upward and working slowly up and down as the pressure came and went.

Wild put his head inside the crew's quarters. He spoke quietly. "She's going, boys. I think it's time to get off." How and Bakewell rose from their bunks, picked up two pillowcases in which they had stowed some personal gear, and followed Wild back up on deck.

Wild next went down into the ship's tiny engine room. Kerr, the second engineer, was standing at the foot of the ladder, waiting. With him was Rickenson, the chief engineer. They had been below for almost seventy-two hours maintaining steam in the boilers to operate the engine-room pumps. During that time, though they couldn't actually see the ice in motion, they were altogether aware of what it was doing to the ship. Periodically her sides—though they were 2 feet thick in most places—bowed inward 6 inches under the pressure. Simultaneously, the steel floor plates jammed together, screeching where their edges met, then buckling up and suddenly overriding one another with a sharp metallic report.

Wild did not pause long. "Let down your fires," he said. "She's going." Kerr looked relieved.

Wild turned aft to the propeller shaftway. There McNeish, the old ship's carpenter, and McLeod, a seaman, were busy with torn pieces of blankets calking a cofferdam built by McNeish the day before. It had been thrown up in an attempt to stem the flow of water coming into the ship where the rudder and the sternpost had been torn out by the ice. But the water now was almost up to the floor plates, and it was gaining faster than the cofferdam could hold it back and faster than the pumps could carry it away. Whenever the pressure ceased for a moment, there was the sound of the water running forward and filling up the hold.

Wild signaled to the two men to give up. Then he climbed the ladder to the main deck.

Clark, Hussey, James, and Wordie had been at the pumps but they had quit on their own, realizing the futility of what they were doing. Now they sat on cases of stores or on the deck it-

self, and leaned against the bulwarks. Their faces showed the unspeakable toil of the past three days at the pumps.

Farther forward, the dog-team drivers had attached a large piece of canvas to the port rail and made it into a sort of chute down to the ice alongside the ship. They took the forty-nine huskies from their kennels and slid each one down to other men waiting below. Ordinarily, any activity of this sort would have driven the dogs mad with excitement, but somehow they seemed to sense that something very extraordinary was going on. Not one fight broke out among them, and not a single dog attempted to break away.

It was, perhaps, the attitude of the men. They worked with a deliberate urgency, hardly speaking to one another. There was no display of alarm, however. In fact, apart from the movement of the ice and the sounds from the ship, the scene was one of relative calm. The temperature was 8½ degrees below zero, and a light southerly wind was blowing. Overhead, the twilight sky was clear.

But somewhere, far away to the south, a gale was blowing toward them. Though it probably wouldn't reach their position for at least two days, its approach was suggested by the movement of the ice, which stretched as far as the eye could see, and for hundreds of miles beyond that. So immense was the pack, and so tight, that though the gale had not yet reached them, the distant pressure of its winds was already crushing the floes together.

The whole surface of the ice was a chaos of movement. It looked like an enormous jigsaw puzzle, the pieces stretching away to infinity and being shoved and crunched together by some invisible but irresistible force. The impression of its titanic power was heightened by the unhurried deliberateness of the motion. Wherever two thick floes came together, their edges butted and ground against one another for a time. Then, when neither of them showed signs of yielding, they rose, slowly and often quiveringly, driven by the implacable power behind them. Sometimes they would stop abruptly as the unseen force affecting the ice appeared mysteriously to lose interest. More frequently, though,

the two floes—often 10 feet thick or more—would continue to rise, tenting up, until one or both of them broke and toppled over, creating a pressure ridge.

There were the sounds of the pack in movement—the basic noises, the grunting and whining of the floes, along with an occasional thud as a heavy block collapsed. But in addition, the pack under compression seemed to have an almost limitless repertoire of other sounds, many of which seemed strangely unrelated to the noise of ice undergoing pressure. Sometimes there was a sound like a gigantic train with squeaky axles being shunted roughly about with a great deal of bumping and clattering. At the same time a huge ship's whistle blew, mingling with the crowing of roosters, the roar of a distant surf, the soft throb of an engine far away, and the moaning cries of an old woman. In the rare periods of calm, when the movement of the pack subsided for a moment, the muffled rolling of drums drifted across the air.

In this universe of ice, nowhere was the movement greater or the pressure more intense than in the floes that were attacking the ship. Nor could her position have been worse. One floe was jammed solidly against her starboard bow, and another held her on the same side aft. A third floe drove squarely in on her port beam opposite. Thus the ice was working to break her in half, directly amidships. On several occasions she bowed to starboard along her entire length.

Forward, where the worst of the onslaught was concentrated, the ice was inundating her. It piled higher and higher against her bows as she repelled each new wave, until gradually it mounted to her bulwarks, then crashed across the deck, overwhelming her with a crushing load that pushed her head down even deeper. Thus held, she was even more at the mercy of the floes driving against her flanks.

The ship reacted to each fresh wave of pressure in a different way. Sometimes she simply quivered briefly as a human being might wince if seized by a single, stabbing pain. Other times she retched in a series of convulsive jerks accompanied by anguished outcries. On these occasions her three masts whipped violently back and forth as the rigging tightened like harpstrings. But most

agonizing for the men were the times when she seemed a huge creature suffocating and gasping for breath, her sides heaving against the strangling pressure.

More than any other single impression in those final hours, all the men were struck, almost to the point of horror, by the way the ship behaved like a giant beast in its death agonies.

By 7 P.M., all essential gear had been transferred to the ice, and a camp of sorts had been established on a solid floe a short distance to starboard. The lifeboats had been lowered the night before. As they went over the side onto the ice, most of the men felt immense relief at being away from the doomed ship, and few if any of them would have returned to her voluntarily.

However, a few unfortunate souls were ordered back to retrieve various items. One was Alexander Macklin, a stocky young physician, who also happened to be the driver of a dog team. He had just tethered his dogs at the camp when he was told to go with Wild to get some lumber out of the ship's forehold.

The two men started out and had just reached the ship when a great shout went up from the campsite. The floe on which the tents were pitched was itself breaking up. Wild and Macklin rushed back. The teams were harnessed and the tents, stores, sledges, and all the gear were hurriedly moved to another floe a hundred yards farther from the ship.

By the time the transfer was completed, the ship seemed on the point of going under, so the two men hurried to get aboard. They picked their way among the blocks of ice littering the forecastle, then lifted a hatch leading down into the forepeak. The ladder had been wrenched from its supports and had fallen to one side. To get down, they had to lower themselves hand over hand into the darkness.

The noise inside was indescribable. The half-empty compartment, like a giant sounding box, amplified every snapping bolt and splintering timber. From where they stood, the sides of the ship were only a few feet away, and they could hear the ice outside battering to break through.

They waited for a moment until their eyes grew accustomed to the gloom, and what they saw then was terrifying. The uprights

were caving in and the cross members overhead were on the verge of going. It looked as if some giant vise were being applied to the ship and slowly tightened until she could no longer hold out against its pressure.

The lumber they were after was stored in the black-dark recesses of the side pockets in the very bow of the ship. To reach it, they had to crawl through a thwartships bulkhead, and they could see that the bulkhead itself bulged outward as if it might burst at any moment, causing the whole forecastle to collapse around them.

Macklin hesitated for just a moment, and Wild, sensing the other's fear, shouted to him above the noise of the ship to stay where he was. Then Wild plunged through the opening and a few minutes later began passing boards out to Macklin.

The two men worked with feverish speed, but even so the job seemed interminable. Macklin was sure they would never get the last board out in time. But finally Wild's head reappeared through the opening. They hoisted the lumber up on deck, climbed out, and stood for a long moment without speaking, savoring the exquisite feeling of safety. Later, to the privacy of his diary, Macklin confided: "I do not think I have ever had such a horrible sickening sensation of fear as I had whilst in the hold of that breaking ship."

Within an hour after the last man was off, the ice pierced her sides. Sharp spears drove through first, opening wounds that let in whole blocks and chunks of floes. Everything from midships forward was now submerged. The entire starboard side of the deckhouse had been crushed by the ice with such force that some empty gasoline cans stacked on deck had been shoved through the deckhouse wall and halfway across to the other side, carrying before them a large framed picture that had hung on the wall. Somehow, the glass on its front had not broken.

Later, after things had settled down at the camp, a few men returned to look at the derelict that had been their ship. But not many. Most of them huddled in their tents, cold through and tired, for the time being indifferent to their fate.

The general feeling of relief at being off the ship was not shared by one man—at least not in the larger sense. He was a thickset individual with a wide face and a broad nose, and he spoke with a trace of an Irish brogue. During the hours it took to abandon the ship, he had remained more or less apart as the equipment, dogs, and men were gotten off.

His name was Sir Ernest Shackleton, and the twenty-seven men he had watched so ingloriously leaving their stricken ship were the members of his Imperial Trans-Antarctic Expedition.

The date was October 27, 1915. The name of the ship was *Endurance*. The position was 69°5′ South, 51°30′ West—deep in the icy wasteland of the Antarctic's treacherous Weddell Sea, just about midway between the South Pole and the nearest known outpost of humanity, some 1,200 miles away.

Few men have borne the responsibility Shackleton did at that moment. Though he certainly was aware that their situation was desperate, he could not possibly have imagined then the physical and emotional demands that ultimately would be placed upon them, the rigors they would have to endure, the sufferings to which they would be subjected.

They were for all practical purposes alone in the frozen Antarctic seas. It had been very nearly a year since they had last been in contact with civilization. Nobody in the outside world knew they were in trouble, much less where they were. They had no radio transmitter with which to notify any would-be rescuers, and it is doubtful that any rescuers could have reached them even if they had been able to broadcast an SOS. It was 1915, and there were no helicopters, no Weasels, no Sno-Cats, no suitable planes.

Thus their plight was naked and terrifying in its simplicity. If they were to get out—they had to get themselves out.

Shackleton estimated the shelf ice off the Palmer Peninsula—the nearest known land—to be 182 miles WSW of them. But the land itself was 210 miles away, was inhabited by neither human beings nor animals, and offered nothing in the way of relief or rescue.

The nearest known place where they might at least find food and shelter was tiny Paulet Island, less than a mile and a half in diameter, which lay 346 miles northwest across the heaving pack ice. There, in 1903, twelve years before, the crew of a Swedish ship had spent the winter after their vessel, the *Antarctic*, had been crushed by the Weddell Sea ice. The ship which finally rescued that party deposited its stock of stores on Paulet Island for the use of any later castaways. Ironically, it was Shackleton himself who had been commissioned at the time to purchase those stores—and now, a dozen years later, it was he who needed them.

chapter 2

Shackleton's order to abandon ship, while it signaled the beginning of the greatest of all Antarctic adventures, also sealed the fate of one of the most ambitious of all Antarctic expeditions. The goal of the Imperial Trans-Antarctic Expedition, as its name implies, was to cross the Antarctic continent overland from west to east.

Evidence of the scope of such an undertaking is the fact that after Shackleton's failure, the crossing of the continent remained untried for fully forty-three years—until 1957–1958. Then, as an independent enterprise conducted during the International Geophysical Year, Dr. Vivian E. Fuchs led the Commonwealth Trans-Antarctic Expedition on the trek. And even Fuchs, though his party was equipped with heated, tracked vehicles and powerful radios, and guided by reconnaissance planes and dog teams, was strongly urged to give up. It was only after a tortuous journey lasting nearly four months that Fuchs did in fact achieve what Shackleton set out to do in 1915.

This was Shackleton's third expedition to the Antarctic. He had gone first in 1901 as a member of the National Antarctic Expedition led by Robert F. Scott, the famed British explorer,

which drove to 82°15′ south latitude, 745 miles from the Pole—the deepest penetration of the continent at that time.

Then in 1907, Shackleton led the first expedition actually to declare the Pole as its goal. With three companions, Shackleton struggled to within 97 miles of their destination and then had to turn back because of a shortage of food. The return journey was a desperate race with death. But the party finally made it, and Shackleton returned to England a hero of the Empire. He was lionized wherever he went, knighted by his king, and decorated by every major country in the world.

He wrote a book, and he went on a lecture tour which took him all over the British Isles, the United States, Canada, and much of Europe. But even before it was over, his thoughts had returned to the Antarctic.

He had been within 97 miles of the Pole, and he knew better than anyone that it was only a matter of time until some expedition attained the goal that had been denied him. As early as March of 1911, he wrote to his wife, Emily, from Berlin where he was on tour: "I feel that another expedition unless it crosses the continent is not much."

Meanwhile, an American expedition under Robert E. Peary had reached the North Pole in 1909. Then Scott, on his second expedition in late 1911 and early 1912, was raced to the South Pole by the Norwegian, Roald Amundsen—and beaten by a little more than a month. It was disappointing to lose out. But that might have been only a bit of miserable luck—had not Scott and his three companions died as they struggled, weak with scurvy, to return to their base.

When the news of Scott's achievement and the tragic circumstances of his death reached England, the whole nation was saddened. The sense of loss was compounded by the fact that the British, whose record for exploration had been perhaps unparalleled among the nations of the earth, had to take a humiliating second best to Norway.

Throughout these events, Shackleton's own plans for a Trans-Antarctic expedition had been moving rapidly ahead. In an

early prospectus designed to solicit funds for the undertaking, Shackleton played heavily on this matter of prestige, making it his primary argument for such an expedition. He wrote:

"From the sentimental point of view, it is the last great Polar journey that can be made. It will be a greater journey than the journey to the Pole and back, and I feel it is up to the British nation to accomplish this, for we have been beaten at the conquest of the North Pole and beaten at the first conquest of the South Pole. There now remains the largest and most striking of all journeys—the crossing of the Continent."

Shackleton's plan was to take a ship into the Weddell Sea and land a sledging party of six men and seventy dogs near Vahsel Bay, approximately 78° South, 36° West. At more or less the same time, a second ship would put into McMurdo Sound in the Ross Sea, almost directly across the continent from the Weddell Sea base. The Ross Sea party was to set down a series of food caches from their base almost to the Pole. While this was being done, the Weddell Sea group would be sledging toward the Pole, living on their own rations. From the Pole they would proceed to the vicinity of the mighty Beardmore Glacier where they would replenish their supplies at the southernmost depot laid down by the Ross Sea party. Other caches of rations along the route would keep them supplied until they arrived at the McMurdo Sound base.

Such was the plan on paper, and it was typical of Shackleton—purposeful, bold, and neat. He had not the slightest doubt that the expedition would achieve its goal.

The whole undertaking was criticized in some circles as being too "audacious." And perhaps it was. But if it hadn't been audacious, it wouldn't have been to Shackleton's liking. He was, above all, an explorer in the classic mold—utterly self-reliant, romantic, and just a little swashbuckling.

He was now forty years old, of medium height and thick of neck, with broad, heavy shoulders a trifle stooped, and dark brown hair parted in the center. He had a wide, sensuous but expressive mouth that could curl into a laugh or tighten into a

thin fixed line with equal facility. His jaw was like iron. His gray-blue eyes, like his mouth, could come alight with fun or darken into a steely and frightening gaze. His face was handsome, though it often wore a brooding expression—as if his thoughts were somewhere else—which gave him at times a kind of darkling look. He had small hands, but his grip was strong and confident. He spoke softly and somewhat slowly in an indefinite baritone, with just the recollection of a brogue from his County Kildare birth.

Whatever his mood—whether it was gay and breezy, or dark with rage—he had one pervading characteristic: he was purposeful.

Cynics might justifiably contend that Shackleton's fundamental purpose in undertaking the expedition was simply the greater glory of Ernest Shackleton—and the financial rewards that would accrue to the leader of a successful expedition of this scope. Beyond all doubt, these motives loomed large in Shackleton's mind. He was keenly aware of social position and the important part that money played in it. In fact, the abiding (and unrealistic) dream of his life—at least superficially—was to achieve a status of economic well-being that would last a lifetime. He enjoyed fancying himself as a country gentleman, divorced from the workaday world, with the leisure and wealth to do as he pleased.

Shackleton came from a middle-class background, the son of a moderately successful physician. He joined the British Merchant Navy at the age of sixteen and though he rose steadily through the ranks, this sort of step-by-step advancement grew progressively less appealing to his flamboyant personality.

Then came two important events: the expedition with Scott in 1901, and his marriage to the daughter of a wealthy lawyer. The first introduced him to the Antarctic—and his imagination was immediately captivated. The second increased his desire for wealth. He felt obliged to provide for his wife in the manner to which she was accustomed. The Antarctic and financial security became more or less synonymous in Shackleton's thinking. He

felt that success here—some marvelous stroke of daring, a deed which would capture the world's imagination—would open the door to fame, then riches.

Between expeditions, he also pursued this financial masterstroke. He was perennially entranced with new schemes, each of which in turn he was sure would win his fortune. It would be impossible to list them all, but they included an idea to manufacture cigarettes (a sure-fire plan—with his endorsement), a fleet of taxicabs, mining in Bulgaria, a whaling factory—even digging for buried treasure. Most of his ideas never got beyond the talking stage, and those that did were usually unsuccessful.

Shackleton's unwillingness to succumb to the demands of everyday life and his insatiable excitement with unrealistic ventures left him open to the accusation of being basically immature and irresponsible. And very possibly he was—by conventional standards. But the great leaders of historical record—the Napoleons, the Nelsons, the Alexanders—have rarely fitted any conventional mold, and it is perhaps an injustice to evaluate them in ordinary terms. There can be little doubt that Shackleton, in his way, was an extraordinary leader of men.

Nor did the Antarctic represent to Shackleton merely the grubby means to a financial end. In a very real sense he needed it—something so enormous, so demanding, that it provided a touchstone for his monstrous ego and implacable drive. In ordinary situations, Shackleton's tremendous capacity for boldness and daring found almost nothing worthy of its pulling power; he was a Percheron draft horse harnessed to a child's wagon cart. But in the Antarctic—here was a burden which challenged every atom of his strength.

Thus, while Shackleton was undeniably out of place, even inept, in a great many everyday situations, he had a talent—a genius, even—that he shared with only a handful of men throughout history—genuine leadership. He was, as one of his men put it, "the greatest leader that ever came on God's earth, bar none." For all his blind spots and inadequacies, Shackleton merited this tribute:

"For scientific leadership give me Scott; for swift and efficient travel, Amundsen; but when you are in a hopeless situation, when there seems no way out, get down on your knees and pray for Shackleton."

This, then, was the man who developed the idea of crossing the Antarctic continent—on foot.

The largest items needed for the expedition were the ships that would carry the two parties to the Antarctic. From Sir Douglas Mawson, the famous Australian explorer, Shackleton bought the *Aurora,* a stoutly built ship of the type then used for sealing. The *Aurora* had already been on two Antarctic expeditions. She was to carry the Ross Sea party, under the command of Lieutenant Aeneas Mackintosh, who had served aboard the *Nimrod* on Shackleton's 1907–09 expedition.

Shackleton himself would command the actual transcontinental party, operating from the Weddell Sea side of the continent. To obtain a ship for his group, Shackleton arranged to purchase from Lars Christensen, the Norwegian whaling magnate, a ship that Christensen had ordered built to carry polar-bear hunting parties to the Arctic. Such parties were then becoming increasingly popular with the well-to-do.

Christensen had had a partner in this would-be enterprise, M. le Baron de Gerlache. He was a Belgian who had been the leader of an Antarctic expedition in 1897, and was therefore able to contribute many helpful ideas concerning the construction of the ship. However, during the building of the vessel, de Gerlache ran into financial difficulties and was forced to back out.

Thus deprived of his partner, Christensen was pleased when Shackleton offered to buy the ship. The final selling price of $67,000 was less than Christensen had paid to have the ship built, but he was willing to take the loss in order to further the plans of an explorer of Shackleton's stature.

The ship had been named the *Polaris.* After the sale, Shackleton rechristened her *Endurance,* in keeping with the motto of his family, *Fortitudine vincimus*—"By endurance we conquer."

As with all such private expeditions, finances for the Imperial Trans-Antarctic Expedition were perhaps the primary headache. Shackleton spent the better part of two years lining up financial aid. The blessings of the government and of various scientific societies had to be obtained in order to justify the expedition as a serious scientific endeavor. And Shackleton, whose interest in science could hardly be compared with his love of exploration, went out of his way to play up this side of the undertaking. This was hypocrisy in a sense. Nevertheless, a capable staff of researchers was to go with the expedition.

But despite all of his personal charm and persuasiveness, which was considerable, Shackleton was disappointed time after time by promised grants of financial aid which failed to materialize. He finally obtained some $120,000 from Sir James Caird, a wealthy Scottish jute manufacturer. And the government voted him a sum equal to about $50,000, while the Royal Geographical Society contributed a token $5,000 to signify its general, though by no means complete, approval of the expedition. Lesser gifts were obtained from Dudley Docker and Miss Janet Stancomb-Wills, plus literally hundreds of other, smaller contributions from persons all over the world.

As was the custom, Shackleton also mortgaged the expedition, in a sense, by selling in advance the rights to whatever commercial properties the expedition might produce. He promised to write a book later about the trip. He sold the rights to the motion pictures and still photographs that would be taken, and he agreed to give a long lecture series on his return. In all these arrangements, there was one basic assumption—that Shackleton would survive.

In contrast to the difficulties in obtaining sufficient financial backing, finding volunteers to take part in the expedition proved simple. When Shackleton announced his plans he was deluged by more than five thousand applications from persons (including three girls) who asked to go along.

Almost without exception, these volunteers were motivated solely by the spirit of adventure, for the salaries offered were little more than token payments for the services expected. They ranged from about $240 a year for an able seaman to $750 a year for

the most experienced scientists. And even this, in many cases, was not to be paid until the end of the expedition. Shackleton felt that the privilege of being taken along was itself almost compensation enough, especially for the scientists for whom the undertaking offered an unmatched opportunity for research in their fields.

Shackleton built the crew list around a nucleus of tested veterans. The top post as second-in-command went to Frank Wild, a very small but powerfully built man whose thin, mousy hair was rapidly disappearing altogether. Wild was a soft-spoken and easy-going individual on the surface, but he had a kind of inner toughness. He had been one of Shackleton's three companions in the race for the Pole in 1908 and 1909, and Shackleton had developed a tremendous respect and personal liking for him. The two men, in fact, formed a well-matched team. Wild's loyalty to Shackleton was beyond question, and his quiet, somewhat unimaginative disposition was a perfect balance for Shackleton's often whimsical and occasionally explosive nature.

The berth of second officer aboard the *Endurance* was given to Thomas Crean, a tall, row-boned, plain-spoken Irishman whose long service in the Royal Navy had taught him the ways of unquestioning discipline. Crean had served with Shackleton on Scott's 1901 expedition, and he had also been a crewman aboard the *Terra Nova,* which had carried Scott's ill-fated 1910–1913 group to the Antarctic. Because of Crean's experience and strength, Shackleton planned to have him as the driver of a sledge team in the six-man transcontinental party.

Alfred Cheetham, who shipped aboard as third officer, was Crean's opposite in appearance. He was a tiny man, even shorter than Wild, with an unassuming, pleasant disposition. Shackleton spoke of Cheetham as "the veteran of Antarctic," since he had already been on three expeditions, including one with Shackleton and one with Scott.

Then there was George Marston, the expedition's thirty-two-year-old artist. Marston, a boyish-faced, chubby man, had done outstanding work on Shackleton's 1907–1909 trek. Unlike most of the others, he was a married man with children.

The nucleus of veterans was completed when Thomas McLeod, a member of the 1907–1909 expedition, was signed on the *Endurance* as a seaman.

In the matter of selecting newcomers, Shackleton's methods would appear to have been almost capricious. If he liked the look of a man, he was accepted. If he didn't, the matter was closed. And these decisions were made with lightning speed. There is no record of any interview that Shackleton conducted with a prospective expedition member lasting much more than five minutes.

Leonard Hussey, an irrepressible, peppery little individual, was signed on as meteorologist even though he had practically no qualifications for the position at the time. Shackleton simply thought Hussey "looked funny," and the fact that he had recently returned from an expedition (as an anthropologist) to the torrid Sudan appealed to Shackleton's sense of whimsy. Hussey immediately took an intensive course in meteorology and later proved to be very proficient.

Dr. Alexander Macklin, one of the two surgeons, caught Shackleton's fancy by replying, when Shackleton asked him why he was wearing glasses: "Many a wise face would look foolish without spectacles." And Reginald James was signed on as physicist after Shackleton inquired about the state of his teeth, whether he suffered from varicose veins, if he was good-tempered—and if he could sing. At this last question, James looked puzzled.

"Oh, I don't mean any Caruso stuff," Shackleton reassured him, "but I suppose you can shout a bit with the boys?"

Despite the instantaneous nature of these decisions, Shackleton's intuition for selecting compatible men rarely failed.

The early months of 1914 were spent acquiring the countless items of equipment, stores, and gear that would be needed. Sledges were designed and tested in the snow-covered mountains of Norway. A new type of rations intended to prevent scurvy was tried out, as were specially designed tents.

By the end of July, 1914, however, everything had been collected, tested, and stowed aboard the *Endurance*. She sailed from London's East India Docks on August 1.

But the tragic political events of these dramatic days not only eclipsed the departure of the *Endurance,* but even threatened the whole venture. Archduke Ferdinand of Austria had been assassinated on June 28, and exactly one month later Austria-Hungary declared war on Serbia. The powder trail was lighted. While the *Endurance* lay anchored at the mouth of the Thames River, Germany declared war on France.

Then, on the very day that George V presented Shackleton with the Union Jack to carry on the expedition, Britain declared war on Germany. Shackleton's position could hardly have been worse. He was damned if he did, and damned if he didn't. He was just about to leave on an expedition he had dreamed about and worked toward for almost four years. Vast sums of money, much of it involving future commitments, had been spent, and countless hours had gone into planning and preparation. At the same time, he felt very strongly about doing his part in the war.

He spent long hours debating what to do, and he discussed the matter with several advisers, notably his principal backers. Finally he reached a decision.

He mustered the crew and explained that he wanted their approval to telegraph the Admiralty, placing the entire expedition at the disposal of the government. All hands agreed, and the wire was sent. The reply was a one-word telegram: "Proceed." Two hours later there was a longer wire from Winston Churchill, then First Lord of the Admiralty, stating that the government desired the expedition to go on.

The *Endurance* sailed from Plymouth five days later. She set a course for Buenos Aires, leaving Shackleton and Wild behind to attend to last-minute financial arrangements. They were to follow later by faster commercial liner and meet the ship in Argentina.

The trip across the Atlantic amounted to a shakedown cruise. For the ship, it was her first major voyage since her completion in Norway the year before; and for many of those on board, it was their first experience in sail.

In appearance, the *Endurance* was beautiful by any standards. She was a barkentine—three masts, of which the forward one

was square-rigged, while the after two carried fore-and-aft sails, like a schooner. She was powered by a coal-fired, 350-hp steam engine, capable of driving her at speeds up to 10.2 knots. She measured 144 feet over-all, with a 25-foot beam, which was not overbig, but big enough. And though her sleek black hull looked from the outside like that of any other vessel of a comparable size, it was not.

Her keel members were four pieces of solid oak, one above the other, adding up to a total thickness of 7 feet, 1 inch. Her sides were made from oak and Norwegian mountain fir, and they varied in thickness from about 18 inches to more than 2½ feet. Outside this planking, to keep her from being chafed by the ice, there was a sheathing from stem to stern of greenheart, a wood so heavy it weighs more than solid iron and so tough that it cannot be worked with ordinary tools. Her frames were not only double-thick, ranging from 9¼ to 11 inches, but they were double in number, compared with a conventional vessel.

Her bow, where she would meet the ice head-on, had received special attention. Each of the timbers there had been fashioned from a single oak tree especially selected so that its natural growth followed the curve of her design. When assembled, these pieces had a total thickness of 4 feet, 4 inches.

But more than simple ruggedness was incorporated into the *Endurance.* She was built in Sandefjord, Norway, by the Framnaes shipyard, the famous polar shipbuilding firm which for years had been constructing vessels for whaling and sealing in the Arctic and Antarctic. However, when the builders came to the *Endurance,* they realized that she might well be the last of her kind—as indeed she was—and the ship became the yard's pet project.*

She was designed by Aanderud Larsen so that every joint and every fitting cross-braced something else for the maximum strength. Her construction was meticulously supervised by a master wood shipbuilder, Christian Jacobsen, who insisted on

* Though Shackleton bought the *Endurance* for $67,000, the Framnaes shipyard today would not undertake to build a similar vessel for less than $700,000—and the cost might well run to $1,000,000, they estimate.

employing men who were not only skilled shipwrights, but had been to sea themselves in whaling and sealing ships. They took a proprietary interest in the smallest details of the *Endurance's* construction. They selected each timber and plank individually with great care, and fitted each to the closest tolerance. For luck, when they put the mast in her, the superstitious shipwrights placed the traditional copper kroner under each one to insure against its breaking.

By the time she was launched on December 17, 1912, she was the strongest wooden ship ever built in Norway—and probably anywhere else—with the possible exception of the *Fram*, the vessel used by Fridtjof Nansen, and later by Amundsen.

However, there was one major difference between the two ships. The *Fram* was rather bowl-bottomed so that if the ice closed in against her she would be squeezed up and out of the pressure. But since the *Endurance* was designed to operate in relatively loose pack ice she was not constructed so as to rise out of pressure to any great extent. She was comparatively wall-sided, much the way conventional ships are.

However, on the trip from London to Buenos Aires, her hull was altogether too rounded for most of those on board her. At least half the scientists were seasick, and strapping young Lionel Greenstreet, the outspoken First Officer, who had long experience in sailing ships, declared that she behaved in a "most abominable way."

The trip across the Atlantic took more than two months. During the voyage the *Endurance* was under the command of Frank Worsley, a New Zealander who had been to sea since he was sixteen.

Worsley was now forty-two years old, though he looked much younger. He was a deep-chested man of slightly less than average height with a coarse-featured yet handsome face which had a built-in mischievous expression. It was very difficult for Worsley to look stern, even when he wanted to.

He was a sensitive, fanciful individual, and the manner in which he claimed to have joined the expedition, whether it was true or not, characterized him perfectly. As he told it, he was ashore in London, staying at a hotel, when one night he had a

dream in which he pictured Burlington Street, in the fashionable West End section, as being filled with blocks of ice through which he was navigating a ship.

Early the next morning, he hurried over to Burlington Street. As he was walking along he saw a nameplate on a door. It read: "Imperial Trans-Antarctic Expedition." (The expedition's London office was, in fact, at 4 New Burlington Street.)

Inside he found Shackleton. The two men were immediately drawn to one another, and Worsley hardly had to mention that he wanted to join the expedition.

"You're engaged," Shackleton said after a brief conversation. "Join your ship until I wire for you. I'll let you know all the details as soon as possible. Good morning."

With that he shook Worsley's hand and the interview, if that is what it was, had ended.

Worsley had thus been appointed captain of the *Endurance*. That is, he was put in charge of the physical running of the ship under the over-all command of Shackleton, as leader of the entire expedition.

Temperamentally, Shackleton and Worsley had some of the same characteristics. Both were energetic, imaginative, romantic men who thirsted for adventure. But while Shackleton's nature drove him always to be the leader, Worsley had no such inclinations. He was fundamentally light-hearted, given to bursts of excitement and unpredictable enthusiasms. The mantle of leadership which fell to him on the trip across the Atlantic did not rest too comfortably on his shoulders. He felt it was his duty to play the part of commander, but he was woefully out of place in the role. His tendency to indulge his moods became obvious one Sunday morning, when a church service was being held. After some appropriately reverent prayers, the idea struck him to sing a few hymns—and he broke up the proceedings by clapping his hands and demanding impetuously, "Where's the ruddy band?"

By the time the *Endurance* reached Buenos Aires on October 9, 1914, Worsley's lack of discipline had let morale slip to a sorry state. But Shackleton and Wild had arrived from London, and they applied a firm hand.

The cook, who had been an indifferent worker on the trip over,

came aboard drunk and was immediately paid off. Amazingly, twenty men applied to fill the vacancy. The job went to a squeaky-voiced man by the name of Charles J. Green, who was a different sort of person altogether, conscientious almost to the point of being single-minded.

Later, two of the seamen, after a stormy night ashore, tangled with Greenstreet and were similarly let go. It was decided that the complement would be adequate with only one replacement. The berth went to William Bakewell, a twenty-six-year-old Canadian who had lost his ship in nearby Montevideo, Uruguay. He arrived with a stocky eighteen-year-old shipmate, Perce Blackboro, who was hired temporarily as the cook's helper during the *Endurance's* stay in Buenos Aires.

Meanwhile, Frank Hurley, the official photographer, had arrived from Australia. Hurley had been on Sir Douglas Mawson's last expedition to the Antarctic, and Shackleton had hired him solely on the basis of the reputation he had achieved as a result of his work there.

Finally, the last official members of the expedition came on board—sixty-nine sledge dogs that had been purchased in Canada and shipped to Buenos Aires. They were kenneled in stalls built along the main deck amidships.

The *Endurance* sailed from Buenos Aires at 10:30 A.M. on October 26 for her last port of call, the desolate island of South Georgia off the southern tip of South America. She proceeded out the ever-widening mouth of the River Platte, and dropped her pilot the next morning at the Recalada Lightship. By sunset the land had dropped from sight.

chapter 3

They were on their way at last, really on their way, and Shackleton was immensely relieved. The long years of preparation were over . . . the begging, the hypocrisy, the finagling, all were finished. The simple act of sailing had carried him beyond the world of reversals, frustrations, and inanities. And in the space of a few short hours, life had been reduced from a highly complex existence, with a thousand petty problems, to one of the barest simplicity in which only one real task remained—the achievement of the goal.

In his diary that night, Shackleton summed up his feelings: ". . . now comes the actual work itself . . . the fight will be good."

Among some men in the forecastle, however, there was more a mounting air of tension than of relief. The crew list carried the names of twenty-seven men, including Shackleton. Actually there were twenty-eight men on board. Bakewell, the seaman who had joined the *Endurance* at Buenos Aires, had conspired with Walter How and Thomas McLeod to smuggle his pal, Perce Blackboro, on board. As the *Endurance* rose to the increasing swell from the open ocean, Blackboro half crouched behind the oilskins in Bakewell's locker. Fortunately, there was a great deal to be done on deck, so that most of the forecastle hands were employed elsewhere and Bakewell could periodically slip below to give Blackboro a bite of food or a drink of water.

Early the next morning, the three conspirators decided their time had come; the ship was too far from land to turn back. So Blackboro, who by now was severely cramped, was transferred to the locker assigned to Ernest Holness, a fireman who was due to come off watch shortly. Holness arrived, opened his locker, saw two feet protruding from under his oilskins, and hurried back to the quarterdeck. He found Wild on watch and told him of his discovery. Wild immediately went forward and hauled Blackboro out of the locker. He was brought before Shackleton.

Few men could be more forbidding than Ernest Shackleton in a rage, and now, squarely facing Blackboro, his huge shoulders hunched, Shackleton berated the young Welsh stowaway mercilessly. Blackboro was terrified. Bakewell, How, and McLeod, standing helplessly by, never had expected anything of this nature. But then, at the height of his tirade, Shackleton paused abruptly and put his face up close to Blackboro's. "Finally," he thundered, "if we run out of food and anyone has to be eaten, you will be first. Do you understand?"