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Helene Donnelly handed me a cup of coffee, but didn't pour one for herself. I could feel her eyes on me as I drank.

Finally she said, "For God's sake, Marsh, you could say something."

I could. Yeah. As the implications penetrated, the coffee slopped over the rim of the cup. I emptied it quickly and gave it back to her. "How about a refill?"

She refilled it and gave it back to me. "If we haven't got a chance," she said slowly, "I've got as much right to know as you do. Marsh, *have* we got *any* chance?"

I set the coffee down and stood up. I shrugged and spread my hands. "Ask me that seventy days from now, if you're still around to ask, and I'm still around to answer. Then maybe I can tell you 'yes.' Right now, I just don't know. *This* wasn't included in the plans!"

She didn't answer. I walked forward and stared out over the crushed cab at the blue-white CO_2 ice of the Martian north polar cap.

Seventy days. That was the deadline—the physical deadline. It really didn't matter too much. Mechanically, we'd either make it to the equator and carve out a landing strip for the other two ships, or we wouldn't.

We might make that deadline and still miss the other one. The psychological one.

My wife was dead. So was Helene's husband. So were the Travises and the Leonards.

That left just me and Helene, and according to the reasonably well-proven theories of space-crew psychology, she would have to replace my wife and I her husband. It was supposed to be easy, since we wouldn't have been in the same crew if we weren't known to be more compatible than ninety-nine and nine-tenths percent of the world's married couples.

I pictured her in my mind and tried to superimpose "wife" on the image. It didn't work. I gave it up. Maybe later; it had all happened so fast....

Four days ago, the eight ships of Joint Martian Expedition One had gone into orbit around Mars.

Four men and four women in each ship; forty of the most stable marriages discoverable at the present state of the research which had resulted in using the "stabilizing influence" of marriage to stabilize space crews.

Three of those ships were equipped with the streamlined nose-shells and wings necessary to make actual landings on Mars. Number One, my ship, was supposed to make the first landing, on skis, near the edge of the north polar cap. We carried a pair of double-unit sand-tractors, each of which had quarters for four in the front section and carried a featherweight bulldozer on the trailer.

We were supposed to report a safe landing by radio, proceed overland to the equator, and carve out a landing strip, in seventy days. If the radio didn't work, we

were to touch off the remaining fuel in our tanks, after we had everything clear of the blast area.

Right now, a mile or so behind us, the drives and fuel tanks of Number One were sending merging columns of smoke high into the thin Martian air. A magnificent signal.

Only we hadn't touched them off.

And they couldn't have ignited on contact and still be going like that. They couldn't have gone much before Helene and I came to, about seven hours after we hit.

About half a mile in front of us one of the bulldozers lay on its side, a short distance from the wreck of the nose section, slashed open where the tractor had come through it diagonally, missing Helene and myself by inches. The 'dozer, the wingtips, and the tractor unit, which we had climbed into, were the only things left remotely intact.

It was a real, genuine, gold-plated miracle.

I didn't know how it had happened, or why. It occurred at the first shock of landing, and that was the last either of us remembered. Maybe one of the skis collapsed. Maybe one of the drives surged when I cut it back. Maybe there was a rock hidden under the ice. Maybe the ice wasn't thick enough. Maybe a lot of things. We'd never know.

It was small comfort to be sure that according to both the instruments and the seat of my pants there was nothing wrong with my piloting.

That didn't matter. Sixty more people would very probably die if we didn't do the probably impossible. The other ships wouldn't have enough fuel to pull up and get back in orbit if they came down and discovered that the landing strip wasn't there.

"So now what?" Helene finally broke the long silence. "We've looked around and picked up enough pieces to maybe get us there. You're the boss; you know how you want to do it, but I've got to help you. How about letting me in on the secret?"

I swore silently at the guy who had decided that the younger half of the crews should be conditioned to look to the older half for leadership in emergencies. In space you don't want leadership; you want coordination and automatic cooperation. "Okay," I said, not turning, "I'll tell you. But are you sure you'd rather not remain in blissful ignorance?" I regretted the sarcasm instantly.

"I'm old enough to know the facts of death."

"I'll take your word for it, kid. Hell, you already know. Six thousand miles. Seventy days. With just two of us, it'll probably take thirty of them to hack out a strip. It's simple arithmetic."

"I know that, Marsh, but what do we do about it?"

"Get some sleep. Then we'll pick up what pieces we can find and jury rig anything we can't find pieces of. When we find out how much fuel we've got, we can figure out how fast we dare travel. We should be able to find all we can carry; the tanks were self-sealing. When we're sure we've got it all, we take another eight hours

sleep and pull out. From then on we run around the clock; ten hours on and ten off, until something blows up. If anything does, we're probably done.

"So maybe we've got one chance in fifty. Maybe in a hundred. A thousand. A million. It doesn't matter much. Let's get our sleep, and while we're at it, we might try praying a little. This is a time for it if there ever was one."

She was silent a moment, then said, "You know, Marsh, you haven't told me a thing I didn't know?"

I nodded.

"I'm sorry. I'd almost hoped you might know some way out that I haven't been around long enough to pick up."

I didn't answer. I didn't have to. I'd said enough for a month already, and we both knew it.

My speech left an odd feeling in the pit of my stomach. Space crews are not selected for their talkativeness. In space, there is next to nothing to talk about, and a large part of pre-space training consists of developing the ability to be silent. Another part consists of eliminating as much as possible of the remaining necessity for talking.

So many words, meaning so little, amounted almost to blasphemy, but somehow the situation had seemed to call for them.

It was not a situation normally encountered by space crews.

The sounds behind me said that she was unfolding the beds, inflating the mattresses, and then slowly stripping off the three layers of her spacesuit "skin." I waited until I heard the peculiar "snap" she always made when she removed the inner layer, then turned and began removing my own spacesuit.

Space crews are normally nude when the situation does not require spacesuits. It saves weight.

I watched her closely as she hung up the suit and crawled slowly between the covers, and tried to feel something remotely resembling passion. I remained as cold as the thin Martian air on the other side of the rubber-fabric envelope around us.

I gave up the attempt and tried to convince myself that desire would come later, when we got things organized better and the shock wore off. After all, that had also been included in our training.

I shrugged off the rest of my suit and hung it up carefully, strictly from force of habit, and slid into the bunk below hers.

I couldn't sleep. I could relax a little, but I couldn't sleep.

I've been in space a long time.

Eleven years. And five years in training before that. I flew the third ship around the moon and the second to land on it. I flew one-sixth of the materials that built *Ley*, the first "stepping stone" satellite, and one-twentieth of those that went into *Goddard*, the second. I didn't bother keeping track of how much of Luna City got there in my ship. I flew the first and last ship around Venus, and brought back the report that

settled that mystery—dust. Those were the old days; the days of two-couple crews and the old faithful *Canfield* class three-steppers—the "cans."

The days, too, of the satellite-hopping *Von Brauns*—each of which consisted of a *Canfield* crew can stuck on the end of a six-hundred-foot winged javelin with two dozen times the cargo space of a *Canfield*. The "super-cans."

Just four of us then; myself and Mary and Ted and Belle Leonard. Four who might just as well have been one.

Then Mars.

Not that we were ready for it; just that it was a financial necessity to the rest of the project, with Venus eliminated from the picture. Taxes kept us in space. The scientific value of *Ley* and *Goddard* and Luna City wasn't enough for the tax-paying public. They didn't want ice cream; they wanted a chocolate sundae, with all the trimmings. Apparently our public relations people couldn't tell them that the fact that we could get that far in eight years, without an accident, did not necessarily mean that we were in a position to shoot for Mars.

So we shot for Mars.

Ships were no problem, of course. A *Canfield* could have made it from *Goddard* to Mars and back, and wouldn't even have needed its third stage to do it.

We got the first seven of the new *Lowell* class ball-and-girder "space-only" ships—the "cannonballs"—and modified the daylights out of three old *Von Brauns*, for landing purposes.

The crew was the joker. We had to have forty people trained specifically to make the observations and investigations that would justify the trip. Most of the operating crews either didn't have enough training or lacked it entirely. The crews that had started training when we first saw this jump coming weren't ready to be trusted farther than *Ley*.

So we set up four-couple crews; two old and two new, much against our better judgment. It worked out better than anybody had seriously expected, but somehow, even after three years in the same can, eight never became quite as nearly one as four had been.

Helene Donnelly wasn't sleeping much, either. Not a sound came from the bunk above me. Normally she was a rather restless sleeper.

She would be thinking the same things I was; in spite of her relative inexperience, she knew the score. She would be half-consciously looking for me to "do something," even though she knew there was nothing I could do that she couldn't handle just as well.

Damn the guy that decided to implant that tendency in the younger crew members!

I wished there was something I could do to reassure her enough to nullify the effect, but there was nothing. *She knew the score*.

She knew that mechanically we would either make it or not make it.

She knew that it was psychologically impossible for two people conditioned to married life in space to continue to exist in sanity in any other relationship.

"Recombination" had been pounded into us since we first began training.

We were lucky in a way. There was only one possible recombination.

Yeah, lucky.

Helene Donnelly was a good kid, the best. But she was just that. A kid. If we didn't make it, she'd never live to be old enough to vote. She'd been in training since she was fourteen.

I'm almost thirty-five. I don't look it—space doesn't age you that way—but it's all there.

I could have recombined with Belle Leonard. It would have been awkward, but I could have done it. Helene could have recombined with Ed Travis without too much trouble.

But this way—

If we didn't make an honest recombination soon—not just a going through of motions—all the training and conditioning in the Solar System wouldn't be able to prevent us from feeling the terrible sense of loss that normally comes with the death of a loved one.

I was beginning to feel it already.

Helene spoke once while we poked through the wreckage the next "day."

She said: "I've found the rest of the welding torch. It works." She didn't have to. I could see the cloud of steam from half a mile away.

When we returned to the tractor she took off her helmet and went through the motions without any hesitation, but obviously without feeling any more than I did—just the slightly damp contact of cold lips.

"I'm not tired," she said, "I'll start driving." She put on her helmet and climbed down through the airlock.

I hung up my helmet and started to peel off the rest of my suit, then stopped and went to the forward window. I tried to imagine a certain amount of grace in the movements as she clambered up the side of the cab and got in through the hole I'd cut in the crumpled roof. But I've never known anybody who could move gracefully in a space suit.

Except Mary.

Helene was not graceful. Not even a little.

I watched her start the engine and warm it carefully, constantly checking the instruments. There isn't much that can go wrong with a closed-cycle mercury vapor atomic, even when the reaction is catalytically maintained to keep size and weight down. But if anything did go wrong, it would probably stay wrong. We didn't have any spare mercury.

After we'd been moving for about fifteen minutes, I went aft and checked the 'dozer. It was riding nicely at the end of a towbar that had been designed to pull the trailer it was supposed to have ridden on. If it would just stay there—

I watched for a while, then finished peeling off my suit and crawled into my bunk.

I still couldn't sleep.

It took me an awfully long time to wake up. When I made it, I found out why.

I'd only been asleep an hour.

"I knew it was too good to last," I said. "What blew up?"

"Dozer brakes jammed," she said. "Something wrong with the towbar."

That was fine. Perfect operation for twelve days; twenty-six hundred miles covered. Then it had to give trouble.

I rolled out of the bunk. "Well, I didn't think we'd even get this far. Any leaks?" She shook her head.

Fine. That bar was a nightmare of pressure-actuated hydraulics. Very small, very light, and *very* precision. I wouldn't dare go into it very deeply.

Helene moved quietly to the other end of the compartment while I struggled into my suit. It had been that way ever since we started. We'd never tried to go through the motions after that one ineffectual attempt. So far, it hadn't mattered. Driving required all our attention, and after ten hours "up front" there wasn't much problem involved in sleeping, no matter what we had on our minds.

Now it would matter. That bar could take a long time to fix, even if I didn't go in very far. Helene would be just sitting around watching.

If she was my wife it wouldn't have mattered....

She waited until I was through the lock before she followed.

There were normal tread-marks for a hundred feet or so behind the 'dozer, then several hundred feet of shallow ruts. She'd disconnected the 'dozer brakes and then moved forward and stopped slowly—using the brakes on the tractor itself—to see whether the trouble was in the bar or in the actuators on the 'dozer. I checked the actuators, brushed out some dirt and sand, and reconnected, then tried to drive away.

The brakes were still jammed.

"So?" she inquired.

"So we take the bar apart."

"The tech orders were in Ed's head."

"Don't I know it!"

"I didn't think you knew anything about this stuff. Anything specific, I mean."

"I don't."

"But you think you can fix it?"

"No, but I can't make it any worse."

She laughed abruptly. "True. How long?"

"Five minutes; five days. I don't know."

"No."

"Yes."

"Oh." She turned and went back inside.

I relaxed very slowly. Much too much talk again, and all about the much too obvious. We could just as well have wound up at each other's throats.

We still might.

I pulled off the outer layers of my gloves and turned up the heat in the skin-thin layer remaining.

The bar was still jammed when I got it back together, sixty-seven hours later.

"Well, disconnect the damn things and let's move out. We've wasted enough time already." Helene's voice rasped tinnily inside my helmet, barely audible over the gurgle of the air compressor on my back.



I already had the left brake actuator off when she spoke. For a fraction of a second I wanted to go up front and slap her fool head off, then I caught myself and disconnected the right actuator and climbed onto the 'dozer. From now on, one of us would have to ride it, braking with its own controls when necessary.

"Let's go," I said, and then, without thinking, I added: "And be sure you give me plenty of warning when you're going to put on the brakes or turn." I was getting as bad as she was.

She put the big tractor into gear and pulled out, unnecessarily roughly, it seemed to me.

Of course, it could have been the bar.

The next day we hit the rough country. Rough for Mars, that is. Just a lot of low, rolling hills, running at odd angles to each other, with an occasional small outcropping of rust-red, eroded rock to make things interesting. We'd known it was there; it was clearly visible through the thousand-incher on *Goddard*. An ex-mountain range, they'd told us; not enough of it left to give us any trouble.

They couldn't see the rocks, and they didn't know we wouldn't be traveling according to the book.

It was obvious to both of us that riding the brakes on the 'dozer was the rougher job, and called for the quickest reflexes, which I had. Also, Helene had a hair-fine control over her voice, which I didn't have. Long before we hit the hills, I knew exactly how much braking she wanted from the way she asked for it. We couldn't have coordinated better if we'd been married for years.

In spite of that, it was amazing how little ground we could manage to cover in fifteen hours, and how little sleep we could get in the other nine and a half.

Helene stuck to the "valleys" as much as she could, which saved the equipment, but not the time. She couldn't avoid all the hills. Every so often, we'd run into a long, gradual rise, which terminated in a sharp drop-off. The tractor wasn't safe at an angle of over forty degrees. It took anywhere from half a day to a day and a half for the 'dozer to chew out a slot that the tractor could get down.

That was hard enough on us, but having to talk so much made it even worse. We were usually all but at each other's throats by the time the day's run was over. I usually spent three or four hours writhing in my bunk before I finally dozed off. I very seldom heard Helene twisting about in the bunk above me.

The hills ended as abruptly as they began, after less than two hours driving on the thirty-fourth day. We still had almost eighteen hundred miles to go.

"Clear ahead," Helene called back. "How fast?"

We both knew we couldn't possibly make it in the forty days we'd hoped, and that if we did it wouldn't do us any good. We'd used up slightly over six days' worth of fuel for the 'dozer cutting slots for the tractor. There would be a balance between time and fuel that would give us the most possible days to use the 'dozer, when and if we got there.

"What's the active tank reading?" I asked.

"Point four."

Add that to the three inactive tanks, plus the two in the 'dozer, plus the auxiliaries, plus the one remaining salvaged "extra" strapped to the 'dozer's hood. Split it all up in terms of average consumption per mile at a given number of miles per hour. Balance it against miles to the landing site, days left to L-day, and 'dozer average consumption per day....

Ten minutes later I called her and asked: "Can you take an extra hour of driving a day?"

"If you can, so can I. You've got the rough seat."

I knew it was bravado; I did have the rougher ride, but she was a woman, and not a very big one, at that. On the other hand, I didn't dare assume anything but that she meant it. She was just itching for a chance to blow up in my face.

"Okay," I said, "sixteen hours a day, and average fourteen miles an hour. If your fuel consumption indicates more than point two over cruising, let me know."

We covered another two hundred and one miles that day.

On the thirty-fifth day, we covered two hundred and thirty-one miles.

On the thirty-sixth day, we covered two hundred and twenty-four miles.

On the thirty-seventh day, we had covered two hundred and seven miles in the first fourteen and one-half hours.

There wasn't any warning, either in external physical signs or on the tractor's instruments. One minute we were rolling along like a test run at the proving grounds, and the next a four-hundred-foot stream of mercury vapor under pressure was coming out the left side of the tractor.

It lasted only a few seconds. That was all it had to.

I sat and stared for several long minutes, blinking my eyes and trying to see something besides a pure white line. I heard Helene climb slowly down from the cab and go up through the airlock, yet I really didn't hear anything at all.

Finally I got down and turned on my suit light and took a look at the hole.

There wasn't much to see. The hole was no bigger than a small lead pencil, and I probably wouldn't have been able to find it in the dark if it hadn't been surrounded by a slowly contracting area of white-hot metal.

We were lucky. We were incredibly lucky. If that mercury had come out at an angle either one degree higher or lower than it had, we'd have been minus a tread or a chunk of the tractor's body.

I didn't let myself think of how much good that was going to do us, without an engine, or what could keep us from each other's throats now.

I snapped off my light and went inside. There was certainly nothing we could do tonight.

Helene hadn't even taken off her helmet. She was sitting cross-legged in the middle of the floor, hunched over, with her helmet buried in her hands as she might have buried her face in them if her helmet hadn't been in the way. When I got my own helmet off, I could hear her muffled sobbing.

I didn't think; I just reacted. I reached her in one short stride and hauled her to her feet by her helmet. I twisted it a quarter turn to the right and jerked it off. I caught her by the collar as she staggered backwards and slapped her hard across each cheek; with my open palm on the left, backhanded on the right. I let go of her and she slumped back to the floor.

"Snap out of it kid," I said harshly. "It isn't that bad." I turned away from her and began to pull off the rest of my suit, starting with the heavy, armored outer layer of my gauntlets.

I had the inner layer half off before she finally spoke: "Marsh?"

"Yes?"

"I'll kill you for that."

"You frighten me."

"I'm not kidding."

"I know you're not, kid. You're just not thinking straight at the moment. You wouldn't be here if you were the type that could actually commit suicide, when it came right down to the fact."

"We're dead already."

"Then how do you expect to kill me?"

"It will be fun trying, Marsh."

It finally hit me that this was asinine, childish, and getting nowhere in a hurry. "Hell, kid," I said. "We've still got an engine in the 'dozer. It can be done. Maybe not neatly, but it can be done."

"Sure," she sneered, "sure it can be done. The 'dozer must have almost half the power of this hulk. We'll get there all right. We'll get there about the time the people upstairs pile up on the landing strip that isn't there. Then we can use the 'dozer to give them a good, Christian burial.

"Hell, Marsh, there's no sense trying to do it that way. That hole can't be very big. If we take the mercury out of the 'dozer and add what we can find lying around on the sand, and then pour it back in and weld the hole shut, we'll be all right. We'll get there a day or two later, but that won't be nearly as bad as if we try to tow with the 'dozer. Then we can swap mercury again and use the 'dozer. Couldn't be any simpler than that."

Like a fool, I tried to be logical: "How long do you think that weld would hold, kid? And then where would we be?"

"Right where we are now, only maybe a few miles closer. We haven't got anything to lose, and we've got *everything* to gain."

That was the start. In the course of an hour and a half, we covered every possibility and impossibility of the situation. Whatever one of us brought up, the other argued against. We talked like crazy.

We were.

When it finally penetrated that we'd both known everything we'd covered, before we started, I said bluntly: "Shut up."

"Go to hell."

"I suppose I will, eventually. Should I expect to see you there?"

"No."

"I'm sure it can be arranged," I said as I got up.

"You're not going to—?" she asked, suddenly really alarmed.

"No." By that time, she was on her feet, too. I spun her around and forced her to the floor. Then I tied her hands behind her back with some wire that had been lying on the floor behind me. I didn't try to tie her too tightly; just tight enough to be sure she couldn't get at the knots.

She didn't resist nearly as much as I had expected.

I repeated the process on her ankles, then gagged her to stop the insane conversation, and put her in her bunk.

Then I turned out the lights and crawled into my own.

It never occurred to me that there were dozens of things she could cut herself loose with, just lying around the compartment.

I awoke and threw my arm up from sheer instinct. I grabbed something soft, and half-heard a metallic clatter behind my head. There was a weight on top of me, and then the weight and I were on the floor, locked together with the blanket between us.

Full consciousness was slow in coming, in spite of the shock of the activity. It seemed better, somehow, to just stay in that halfway state and enjoy it without knowing why. Finally, gradually, it penetrated that these were "the motions" that we were going through, but that we were not just "going through the motions."

This was for real.

A nasty question followed the thought: if this was for real, why did she keep wriggling and twisting all the time? The answer was close behind. She never had been able to hold still when her husband held her.

It seemed ages before we both realized how unsatisfactory it was to be separated by that blanket, and released each other and lay apart, with the blanket half on me and half on her. After more ages, I got up and turned on the lights. There were certain formalities that really should be observed.

While I pulled on the outer skin of my spacesuit—I wouldn't be outside long enough to need any more—Helene quietly picked out the large wrench she'd dropped at the head of my bunk, and put it back in the case it had come from.

Love and hate are separated only by the thin edge of a coin ... flip it and it can come up either way....

I picked up a sterile specimen tube and a thin, small sheet of metal, locked my helmet in place, and went out.

It took me a little longer than I'd expected to find a reasonably large blob of mercury, but I made up for it by getting it into the tube on the second attempt.

I was just beginning to feel the cold when I got back to the tractor.

Helene had the specimen preservation kit out and open. I sealed the mercury in transparent plastic, made a ring from a piece of wire, bonded the mercury to it, and coated the whole works with more of the transparent plastic.

It wasn't much, but—

Then we got out the Bible.

Later, we set up a double bunk.

We didn't set the alarm. That was our honeymoon.

Neither of us said a word in the morning; actually it was past noon. We didn't have to. There was only one thing we could do that made the slightest sense.

I got out the welder and burned off the tractor's cab, then went underneath and cut through the mountings on the useless engine and everything else that wasn't an absolute essential.

Helene dumped everything movable and non-essential from inside.

Shortly before dusk I tossed the now-useless welder on top of the other junk and climbed onto the 'dozer and pulled out. There weren't any brakes on what was left of the tractor, but that would have to not matter. We were going to have to drive 'round the clock or not get there in time. A bulldozer is not a fast vehicle under any circumstances.

Logically, I couldn't see that we had much chance of covering eleven hundred miles in that rig, without having to make at least one stop quick enough to collapse the towbar and land the tractor on top of the 'dozer.

Emotionally, I couldn't believe a word of it. I *knew* we were going to get there. We did.

Forty-eight days after the crash, I drove through the blackened edge of the northernmost "marker area," and parked just inside its southern tip.

When I came up through the airlock, Helene was looking out what had been the forward port of the tractor, which now faced the area we would have to make into a landing strip.

When I had the inner layer of my suit half off, she spoke for the first time since we'd been married: "We made it, Marsh."

I joined her and looked out into the dusk. It was going to be rough, but we could do it. "Not quite," I said, "we've still got that strip to chew out."

She was silent a moment, then said, tightening her arm around me: "I know. I said we made it, Marsh."