

t is so easy, so free of emotion, to simply state that our migration began on October 2nd. This statement belies the agony we went through trying to decide when to go. How I envied the parent crane! It doesn't wonder, it just heads south when it feels right. We felt that it would feel right to a parent crane to head south when the first hard frost killed the grasshoppers. But, when would that happen? Not knowing, we planned for 2 October: as it turned out, a heavy frost made our choice a good one. As the odyssey unfolds in the following pages, you may wonder if our choice of a departure date was our only good decision.

For the last two weeks of September, I had been borrowing a craniac or two at a time to traverse the route with me so that all would be somewhat familiar with the hazards when we headed south with the cranes pressing at our heels. I also made up "trip-tiks," photocopied map strips with 20% overlap on which I had marked all stop signs, traffic signals, the worst mudholes, and powerlines. On our training trips, the crew members would compare the landscape with their maps and make personal notes indicating maximum speeds for certain hazards, rough spots, and corners. By the time we headed south with the cranes, all six participating personnel had traversed all or nearly all of the route once, and the three primary drivers had covered the route two or more times.

On one of these familiarization trips, some of the guys left the route and spent the evening at my home in the Santa Catalina Mountains, then worked on the radio bands the next day before returning to Camp Navajo. That evening they all enjoyed meeting Lothvar, my then 35-year-old golden eagle. After dinner, they discovered a jar we have had around the house many years: it contains perhaps 300 scorpions and a score of black widow spiders. Some of the guys seemed a little alarmed when they learned that many of these were collected inside the house. I also showed them a smaller bottle containing forty-nine scorpions collected during a single year, all from inside the house. They also learned that Cathy and I have been stung twice each while asleep in bed. With that information stored in their long-term memory banks, I suppose all of them had a little trouble bedding down on the floor that night. However, only one, Matt Shawkey, opted for sleeping in the bed of the pickup truck.

The sixth person on our migration crew was my friend of twentyfive years, Floyd Benjamin Potter Trahan, Jr., my same age, and more boisterous and talkative than any of the much younger crew. Ben had driven a lot of roads requiring four-wheel drive, most of it in twowheel-drive vehicles. Although by October 1995, he claimed to be reformed, he still had no aversion to doing two-wheel-drifts around corners, and four-wheel-drifts could be expected if even the slightest emergency suggested the need. Although he claims that the opposite is true, my recollections from the 1970s are that it was me who was white-knuckled to the dash when he drove. Ben occupies a position as a computer programmer, where I am sure he does a fine job, but my belief is that he really belongs at a university, teaching philosophy, exposing the fallacies of our time. Because he is now deeply into psychological self evaluation, and does not fear peer pressure, he brought his "never-had-one-as-a-kid" teddy bear along for the migration. As a child, I had a teddy bear so I found his bear (or rather its presence on this expedition) rather odd.

On 2 October, all was ready. Ben and I joined the group at camp an hour later than expected because we had to find an unsqueamish person with a large freezer. On our journey north to Flagstaff, we had the good fortune to happen upon a road-killed raccoon with its eyes still firm (the criterion that must be met before I will stoop to salvaging carcasses . . . unless my eagle is very hungry). Further, we were able

to add to our roof rack cache a cottontail and a coyote, both of which had died suddenly of lead poisoning.

Our trek south had been planned in detail. Three vehicles were involved. The cranemobile would normally be in the middle. The lead-car would be either my vintage '76 Scout or the U.S. Air Force pickup of unknown vintage obtained as surplus by the Fish and Wildlife Service and loaned to the project by the Buenos Aires National Wildlife Refuge. The lead-vehicle would carry two stop signs on poles, two orange vests, and two road crew type helmets. Each crane received a leg-band transmitter some days earlier, so the following-car and lead-car would have radio receivers to listen for errant cranes. All three vehicles would have a two-way radio, a set of maps, and, in case they really got lost, my wife's phone number.

The role of the lead-vehicle was to advise of traffic conditions, announce hazards, and most importantly, clear intersections so the cranemobile could rush through with unabated speed. This required that the lead-driver and navigator don vests and helmets as they approached an intersection, spring out of their truck, and take command of the intersection before the cranemobile shot past or the motorists realized that we were neither construction workers nor state-appointed officials.

The following-vehicle trailed the cranemobile by about 200 yards with the navigator in this third car either recording data or announcing, into his two-way radio, data concerning ground speed, altitude of cranes, etc., for the recorder who could be in any car. The best crane watching was from the following-car. The following-car also kept the driver of the cranemobile (whose vision of the birds was blocked by the 30 cubic yard box immediately behind his head) informed of the cranes' whereabouts. Finally, the following-car sometimes had to drop back to search for delinquent cranes.

At 2:30 p.m. the migration began. Because no road connected the trails on Camp Navajo to the Forest Service road heading south, we set out to walk the flock through two and a half miles of forest before beginning the first flight. Five of the cranes, familiar with the area, grew weary of hiking and flew back to camp. Part of the crew hiked back, loaded the five into the cranemobile, and brought them to us on the bumpy trail. When they arrived, they learned that four of the remaining five had also flown back to camp, so we chose to regather

the birds at camp and truck them the long circuitous route to the Forest Service road. It was very frustrating for me to learn that our cranes were so independent. The only bird that was still with us when we arrived at the Forest Service fence was Z-Z. This crane had, until a few days previous, been our most adventurous, least attentive (to us) crane. Then she got lost on a training flight. When she was found, she had no desire to lose her foster parents again.

Two hours later, we unloaded the cranes on Garland Prairie. After a short rest at a pond, we gathered the cranes at the road edge, began waving and shouting, and drove away. All birds launched and followed the cranemobile, but by then the sun had already set, so after only two miles, we stopped on the open prairie, reluctant to lead the cranes into the forest in the approaching darkness. As we began to set up camp in the fading light, we inadvertently flushed the birds before they were penned, and as they circled in the fading light, we were unable to call four of them back to camp. What to do? Ben and I jumped in the Scout and rushed back two miles to the pond where we started flying. No cranes to be seen. Brian and Yoshi loaded their sleeping gear into the Air Force pickup and returned to Camp Navajo with the radio telemetry equipment. That night we stewed, bemoaning my decision to accept the free solar transmitters which were of no use after sunset.

On Garland Prairie, we penned five of the six remaining cranes. Schizoid, ultra-subordinate, paranoid Dennis we left out of the pen, not so much hoping she would fly away, but rather for her own sanity. With darkness, chilly air settled over the prairie: four of us huddled close to the crackling fire with five cranes in the pen and Dennis lurking in the shadows. What would tomorrow bring?

At 5 a.m. it was just getting light as I started to scan for our lost cranes. A thick crust of frost on my sleeping bag helped me decide to conduct my vigil from within. At 6:02 a.m., one lost crane walked into camp, and two more were spotted walking on the prairie 100 yards south. At 6:16 a.m., I saw a fourth crane flying about a half mile to the southeast. We jumped up, shouted, and called, and the tenth crane flew into camp. Ben and I sped back to Camp Navajo to alert Brian and Yoshi that we were calling off the search. We all zoomed to Garland Prairie, broke camp, lured the birds to the road, and then all three vehicles drove away with the cranes standing stupidly at the road edge.

We were a quarter mile west before they lifted off. They quickly caught up, and within two miles, we left the prairie and plunged into the forest. The birds were doing great: 200 feet up and matching our turns in the road perfectly. Only three miles into the forest, we arrived at the first stop sign of the trip. Curt and Ben in the lead-car stood in the intersection in orange vests and helmets, with stop signs at the ready. I blasted through in the cranemobile. Things couldn't be better, but a half mile later, we had no idea where the flock went. I called for a halt: we all jumped out calling and waving. All ten cranes circled over the forest canopy, dropped down through the trees, and alighted, ready for a drink and a bite of food.

After a half hour rest, we climb back into the trucks, and flapping and squawking, drive off. This time the cranes are eager to follow, and soon we are lumbering along with the cranes just above the forest canopy.

After only two miles, all ten veer sharply south and just disappear. It is our turn to stand in the road looking stupid. What to do? We assemble our radio telemetry equipment and begin the search. Within the hour, we find Miles, the leg dangler, at the road edge, alone and peeping for his human mama. I congratulate myself for not allowing CNN to film our expedition. Imagine how it would sound on the news. "The craniacs are now a full day into the migration, the cranes have flown an amazing ten miles, have gotten lost three times, and this team of extraordinary scientists still retain 10% of their flock."

The leg-band radios send back a "beep, beep, beep" from somewhere through the forest to the south. We split into three teams and search. One team hikes two miles to the head of Sycamore Canyon, one of God's most beautiful creations. When we are on the north side of the canyon, the signal says the cranes are south, but when we cross to the south side, the signal says the cranes are north. Anybody who has done fieldwork with radio telemetry knows this trick. What we have been following for two hours is the radio signal reflected off the canyon walls. But which wall and which way? We choose north, and hike until near sunset. Finally we realize the signal is coming from (probably reflected from) a tall hill. Three of us climb the hill, see Garland Prairie two miles east, and check our receiver. Yes, the signal is very strong from Garland Prairie. We gather the scattered troops, and streak back to the Prairie.

As it is too dark for solar leg bands to transmit, we all return to the previous night's campsite, turn our attention to our second most schizo bird, leg-dangler Miles, and act cheerful, each of us trying to avoid thinking that this project which has consumed much of our summer, is shaping up to be a ridiculous failure. Well, we have got one bird, a nice campfire, a warm sleeping bag, and elk are bugling in the forest to the southeast. Things could be a lot worse. Tomorrow we will find our birds and try again.

Day 3: 4 October. Sunrise at 6:30 a.m., 30°F, an eighth of an inch of ice in the soup pot, and one crane in camp. At least we still have six guys and all three trucks are working. We break into teams, begin scouting, and at 8:56 five cranes circle down and land near Curt and Yoshi at the west end of Garland Prairie. At 9:45, one more crane drops in. Now we have seven and among these are all three males. What to do? I decide that we will not give up, but will spend the rest of the day searching. Earlier, as we were zooming around coordinating teams, a front tire on the cranemobile had gone flat. Steel wires were exposed for half of the circumference . . . cursed, under-funded, government project. Nothing to do but for Ben and I to excuse ourselves, take a run to Williams, discover that prices are indeed higher in small towns, drive the thirty miles to Flagstaff, and get a proper tire.

While we were gone, two more cranes dropped in, the much maligned Dennis and Meerta, Matt's favorite. Only 116 is missing. This gentle, sleek, silver-gray, gorgeous bird is a favorite with everyone. At 5:45 that evening, I decide we have waited long enough. We load the cranes and drive along yesterday's flown route and cut south another eleven miles until we are out of the tall forest and into the piñon-juniper woodlands. We calculate that we should be able to keep the birds in sight over this shorter forest, so we pull fifty feet off the road and camp. Very quickly we wrap a net around a small clump of piñon and juniper trees, herd the cranes inside, provide them with food and water, then tend to our own needs.

One odd thing about our crew is that they all (except Ben and me) cook separately. Yoshi cooks kinda Japanese, Curt is a vegetarian, Brian likes Top Ramen (if you watch sales you can buy these for only 10 cents a packet). While Ben and I were getting the new tire earlier in the day, we loaded up on MEGA cans at a bargain food store so most

days from now on we would open a mega-pear, mega-peaches, or mega-pudding can.

As the evening wears on, my thoughts focus on our troubles. Why did the cranes twice break away when all was progressing well? I remember the eagles we had seen at three locations as we gathered our cranes. The golden eagle is, of the 9,000 species of birds that grace our world, by far my favorite. Little did I know what important role this special bird was to play in the days ahead.

Day 4: 5 October. Awake at dawn. We are now well below the frosty pine forests so it is much easier to get going. By 7:36 a.m., we pull onto the road to begin the best day of the trip.

We glide along paved roads with well-rounded curves, all downhill. The cranes slip easily through the air: we must travel 45-50 mph to stay ahead of them. Halfway down the hill, a canyon opens on the left, and Brian spots a golden eagle circling in toward the cranes. Our little flock veers abruptly to the right, but stays close to the cranemobile. Ahead, the pavement ends and we must wind on very rough roads across a narrow canyon. Ben and I speed ahead and prepare to call down the cranes. As the cranemobile and the other car approaches, we see our birds are looking trim and fit, so I make a quick decision. I call for everybody to stay in their cars and go for it. As the cranes circle overhead, our little convoy enters the canyon, bounces across the wash bed, then up onto the far rim. We all bolt from our cars and run squawking and flapping into the open. The birds circle again and again. We expect them to be tired, but they are ready for more. After five more minutes, they circle down and land all about us. We rest and water them for a half hour, then start up our engines. The birds come to attention. We're off, flapping and squawking our way west to Hell Canyon.

On the way, the road crosses two powerline corridors just as the lines cross each other. The result is something of a hazard, so Ben and I, in the lead-car, pull ahead to watch the passage. The cranemobile is approaching with a cloud of dust at its heels. The cranes form an undulating line 150 feet above and a little behind the cranemobile as it passes under the wires. The cranes pass above the two-phase 230 KV line, but are at the same height as the conductors on the 500 KV line. The tension rises. The lead bird passes over the wires, the trailing birds are lower and will pass under, but the intervening birds flip sideways as

they pass between the wires. Our 40, a beautiful, gray female, flares to miss the line. As she does so, both legs slap against the conductor. She tumbles, then plummets downward. We look back and sicken at the sight. Then she regains control, levels out, and pumps frantically trying to catch up with her flock mates. It appears she is gaining on the flock, but then we notice that both legs are dangling and blood seems to be dripping from her legs. For three long miles, she valiantly pumps along, then begins to lose her battle to join the flock. Slowly she drops back, then sets her wings and glides down into the juniper forest. The flock, in seeming sympathy, circles back, divides into two groups, and drops slowly into the junipers. We in the vehicles circle back, dig out the radio telemetry equipment and spend the next half hour triangulating on cranes scattered through the woods. Yoshi follows one signal back into the junipers and finds 40 lying on the ground in the shade of a small juniper.

At first he radios us that she is okay, but as he lifts her, he feels the blood running from her legs. Yoshi quietly announces, "Looks like leg broken." I leave Brian and his team with three cranes and rush through the forest to join Yoshi. Yes, not only one, but both legs are broken. Over the two-way radio, Brian and I discuss our options. Cranes with even one broken leg seldom survive even with the best veterinary care. I agree with Brian's assessment . . . we should end her suffering. At both ends of the radio link, all converse and concur. I ask Yoshi to carry 40 to a juniper stump. With heavy heart he does so as I walk with dread to my four-wheel-drive and draw my machete from under the carpet. Yoshi cradles the crane. Robert Doyle extends the crane's neck over the stump, and the blade flashes down. Death is instantaneous.

We reassemble our flock. The cloud of mourning dispels somewhat. We rise and prepare to cross Hell Canyon. Although the canyon is about 800 feet deep, it is a lot less like hell than many canyons in Arizona. To approach the rim of the canyon, we must first maneuver about 500 yards of a cactus-riddled, juniper woodland. The craniacs all walk very carefully to avoid prickly pear cactus spines, but the cranes seem to naturally avoid these hazards without concern.

My plan at Hell Canyon is for Brian and me to wait on the canyon rim with the cranes while the rest of the guys drive two vehicles on a four and a half mile loop to the north and back to the west side of the canyon where they will lure the birds across once Brian and I get them airborne. In about thirty minutes, the four craniacs are in position to the west with two vehicles. Brian and I call a loud gargling whoop, the sandhill crane ready-to-go-squawk. The cranes are immediately heads-up, then as Brian and I run and flap toward the canyon, the cranes fall in behind us. Brian and I jump just over the upper rim of the canyon and slide deftly out of sight behind great basalt boulders so that the cranes will focus on our compatriots across the canyon. The plan works. The cranes pass over our heads, circle over the canyon, then soar for five to ten minutes until one by one they float down to join the craniacs a quarter of a mile away and 200 feet below.

With the cranes safely across, Brian and I race to the Scout and speed to the far side of the canyon. After an hour resting the cranes and walking them to Highway 89, we all sit in the shade of a juniper, as trucks roar past at speeds well over the legal limit. How were we going to get the birds going without endangering them, us, and the locals? Having already lost one lovely crane: how can we avoid losing another? We move all three cars down onto the edge of the road. Ben and I walk onto the rim of the road cut looking down twenty feet at the highway. The cranes follow and with a little coaxing, we get them through the barbed wire fence. We wait until we have an opening in the traffic. then two of our trucks start moving and pull ahead of us. Brian toots his whistle and waves frantically from the rear of the cranemobile. Ben and I begin running and flapping and squawking in Brian's direction: the cranes sprint along behind. Ben and I jump over the rim of the road cut and slide down to the highway. The cranes take their cue and fall in behind the cranemobile. Ben and I scramble into my Scout and we are soon catching up to our troops.

The birds climb to 200 feet and although cars zoom past us coming and going, we are making good progress. Our excitement rises despite the lingering shadow of our recent loss. Three miles pass, then five. As we begin the slow climb over a long juniper-covered ridge, the crane's trajectory converges with the slope of the hill. In horror, I watch as a pickup truck speeds over the hill toward us just as the birds veer onto the roadway. Over my shoulder and in a split second, I calculate the height of the birds, assess the potential for impact. My brain forecasts a collision. Ben grabs the wheel as I turn to watch the outcome. The leading cranes see disaster coming and veer away, but the last bird flares barely ahead of the oncoming truck. Its legs pendulate

downward within two feet of the truck's windshield. I squawk on the radio, "Let's pull over and regroup." Our little convoy veers to the right and we all rush about assembling our migrants. I call for a conference, then vent my fears. I am at an emotional nadir. The craniacs form a circle, and, as if also wishing to participate in the discussions, the cranes form a ring around us. I ask for opinions. An hour ago we lost a bird, and now we have nearly arranged for a windshield collision. The crane almost surely would have died, and we are loath to think what could have happened to the driver. What right have we, have I, to jeopardize life and limb? I recommend we "throw in the towel: why continue to execute what was from the beginning a bad idea." The guys, each in turn, express themselves. My friends feel it is worth the try. We can be more careful. We are almost to the rim of the plateau. We should continue on. The cloud dispels somewhat, optimism returns. We rise, position our flock, and start off. From the plateau top it is a long slow glide down into Chino Valley. The cranes rest on the wing as they make their descent.

As we approach the valley floor, the cranes climb to about 700 feet which confuses the cranemobile driver (who will remain un-named) and causes him to slow down, causing one crane to drop down to join the truck. Simultaneously, Brian's police whistle (which had long ago replaced his overtaxed vocal cords as the instrument of choice when conversing with the flying cranes) stimulates a boxer dog to rush from its residence 100 yards from the road. So . . . the cranemobile driver stops because it looks like the crane is going to land: the crane lands on the pavement because the cranemobile stops: the dog rushes to the whistle because that's what he was trained to do: Brian jumps out of the cranemobile to attack the dog because he can't help himself, and the traffic stops because they don't know what else to do. Then two craniacs (who will not be named) throw rocks at the dog, pounce on a very puzzled 109, load it into the cranemobile, and speed away while eight other cranes soar overhead. The uninvolved motorists gawk and think . . . "Can't say I've seen that happen around here before." Once this flight is over, it will be my job to disentangle the causes of the event and prevent similar occurrences.

I have often marveled how an unanticipated and fleeting event can change our lives forever: produce an incident which will never be understood, create a memory which will never be forgotten. Fortunately, this ten-second anomaly in world history resulted in no crushed bodies (canine, gruine, or hominid), no twisted metal, and neither shattered glass nor shattered lives.

Just a few miles ahead, there is a lot of shattered glass on the highway, two crumpled cars, and a dozen or so undamaged cars are stopped on the road while their occupants rubberneck the scene. The only thing that draws human attention more efficiently than a swapmeet is a traffic accident. We have a flock of cranes overhead and we do not want them to land in the midst of a traffic spectacle so our convoy veers right, off the road, and bounces its way past the lookers-on. For a few seconds, the focus of the whole crowd, even the victims, shifts from the twisted metal to the flag-flying ambulance and the big birds attending it from on high. For a fleeting moment, a motorized migration replaces traffic accidents as "numero uno" on the list of human fascinations.

Safely around the traffic accident, we speed on for another four miles and land our cranes at the north end of Sullivan Buttes, fifty feet from the locked gate marking the perimeter of the John Punchcow ranch.

It's noon. As we wait, watering our cranes and wishing for more shade than the cranemobile can provide, a cowboy rides up in a pick-up and opens the Punchcow gate. I stride quickly to his side, hoping my unwashed body and weird costume will not offend. He very attentively listens to my desires to continue west, laments Mr. Punchcow's uncooperative stance, locks the gate, and then drives away. Okay guys, let's load 'em up.

With all cranes safely aboard, we drive back east to begin the 40-mile circuit to the other side of the Punchcow ranch. In Paulden, we stopped for fuel and a cool treat. Almost without exception, everyone we meet at roadside stops wants to know why we are driving a MASH wagon and why the strange attire. Few believe, without a peek in the big box, that the real reason for our strange clothing, vehicles, and behavior is that our truck harbors a flock of cranes.

At the start of the next leg, we are now far enough west of the Bradshaw Mountains to finally start directly south. It is 2:20 p.m.: we are on the open prairie at the west edge of the Punchcow ranch. The birds are rested, watered, fed, and ready to fly south into Skull Valley. At 2:23 p.m., they lift off. The birds have flown thirty miles today and

are really behaving like a team. They flap along at about 200 feet forming a long undulating line. Unbeknownst to the cranes, a prairie falcon is resting on a powerline tower directly ahead. Like a football team closing in to prevent the punt return, the cranes converge on the metal tower. The falcon gets very sleek and calls for a fair catch, but the ten cranes inexorably, unflaggingly close in. The falcon panics, forgets that it is all a game, and flaps frantically to the side.

On the mid-afternoon thermals, the cranes climb to about 1,000 feet and glide south parallel to the cranemobile. After about three miles, a raven begins pursuing the flock: no problem. Eight miles go by and we turn southwest onto Fair Oaks Road. Dust and gravel spray as we skid around the first corner. The road has too many corners, the cranes drop down and match our turns. They are only forty feet above the ground, and we are really working to stay ahead of them on the windy road.

Ben and I, in the lead-car, notice that no one is behind us. We stop, wait five minutes. Nope, no one is coming. We retrace our route, and at mile 79 we see our troops (cranes and craniacs) gathered at the road side. The cranes are looking around unconcerned, one pecks at a grasshopper, two peck at nothing but the dirt. Our team members are huddled close together examining something on the ground. We walk closer: it is gray, smells of burnt feathers, and is very dead. Crane 89, one of our big males, lies there, just as beautiful as a few moments before. Brian and the four craniacs saw it happen. As the flock passed through the low voltage distribution line that joined us two miles earlier, 89, in the rear, veered too late, collided, and fell limp without a struggle. This "last bird is vulnerable" pattern is becoming quite clear.

Much of our flight training at Camp Navajo was designed to prevent this. What went wrong? Though we many times flew our birds through powerlines so they would learn to avoid collisions, we were never convinced that they were really educated. The lead birds always seemed to detect the lines and swerve away, but we always felt that the last birds were just following the earlier birds and not watching for hazards. We had often seen the last birds flare and nearly collide, much like the last car in a chain collision really has no time to react. This is our second powerline fatality.

There was nothing to do but stow 89 in a truck with 40 for a necropsy that night, and go on. The eight remaining birds fell quickly

into formation. We were all shaking our heads, stunned at the loss of 89, a very valuable bird, a chick that the craniacs had reared and trained and watched develop since hatching. The beauty of the high rolling hills, the oak savanna, and the thin line of cranes following us 500 feet aloft lessened our distress.

We continue south, everything is apparently perfect, then Matt squawks on the radio, "There's a large black bird approaching the cranes." One glance over my left shoulder and I know in an instant what is happening. An adult, probably female, golden eagle folded like a fighter jet, is plunging earthward toward our tiny flock. In one movement, I hit the brakes, bark for my rifle, and hand the steering wheel to Ben. Before the car stops skidding, I am standing by the dirt road firing shot after shot toward my favorite species. The eagle, recovering from her stoop through the flock, shoots up, stalls, then begins circling back as if for another try at the now scattered cranes. She hears the quick barking of my rifle, listens as tiny lead projectiles whiz past, turns quickly away from the cranes, and makes for the eastern horizon, Granite Mountain. She was never really threatened by my shots. I have never killed an eagle and made sure my slugs were well wide of the mark

Even before I finish shooting, the cranes begin raining around me into the scrubby vegetation at the road edge. This brushy hillside is anything but crane habitat, but once again, the cranes are glad to be near Mother. Matt walks up and thanks me for saving his cranes. I take no credit, and as we eventually learn, it is actually the speed and maneuverability of these cranes, even though they are juveniles, that makes them a good match for even an adult eagle.

Relieved to think we may actually have some effect during an eagle attack and pleased to see that our little charges are able to avoid the eagle's lethal talons, we water our flock and head south. The road twists and turns, climbs and plunges, but we are progressing well. We have the birds right on our tail when the cranemobile passes under a railroad trestle. No problem: car under, birds over.

Our last hurdle for the day is the climb up to the paved road heading south and downhill into the little hamlet of Skull Valley. Once the cranemobile is on the pavement, our cranes decide to show us what they can do. They catch rising air, spiral up to about 2,000 feet, then soar along behind us. Finally, about a half mile north of the village, our

little flock begins drifting east with the wind. All three trucks pool up at the road edge. We stand there flapping and calling until the troop starts back in our direction.

Now the rush is on to get back on the road and give the cranes an object to follow before they think of something else to do. I am in the Scout behind the cranemobile: we rush ahead to show the other craniacs the side road to the Dave Jenner ranch. No time to waste as we blast into the one-gas-station, one-store town of Skull Valley. Unfortunately, we forgot to warn the populace that we were coming. Three teenage girls stand in the road exchanging pleasantries with a pickup load of boys. All are blocking our turn to the south. The horn on my Scout does not work, so only our movements will tell these girls what to do. As we plunge forward, I can read these girls like an optometrist's chart. The girl on the left is clearly going to jump left, the one on the right will snuggle right against the boy's truck, and the girl in the middle (who is directly in our path) is going to jump both ways. We in the lead-car detect only terror as we sweep by. The cranemobile, second around the corner, sees nervous tee-hee's, and by the time the following-car slips around the corner, laughter has replaced thoughts of lawsuits.

Visions of near mayhem fading in our rear view mirror, we gun the Scout toward the Jenner boundary. There will be no time to saunter quietly down Mr. Jenner's cottonwood lined lane, no time to announce our arrival. The birds are too high and too loose for us to focus on anything but getting them down fast. My Scout skids to a dusty halt at the road edge. I spring over the fence with Ben plunging along at my rear. We race into the open meadow, screaming and waving to the flock 1,500 feet overhead. Soon the other cars arrive. One, two, then three other craniacs join us. We stand there, each of us in our own little whirlwind of thoughts. They thinking how stupid we will look if the cranes do not come down, how stupid we already look flapping and squawking, and me thinking how glad I am that I told CNN to get lost. The cranes carve circle after lazy circle in the warm afternoon sky. Why go down to the overheated surface? What earthly reward could compensate for this celestial view? Why land in a dusty, cowpie-dotted field? Then, the answer came to them. Mama. Crane baby wants mama.

One crane starts down, plunging through the intervening space. Another takes its lead. Then I notice: Hell! We are in the wrong field. Like a prison escapee, I sprint for the fence, put two hands on the top wire, and sail over, barking my invitation for my fellow craniacs to join me, pronto.

Swoop, flail, plop: swoop, flail, flop. The cranes one by one drop at our feet. All of them. Soon we are all grinning and congratulating ourselves and the birds. Brian Clauss slowly, deliberately, walks over to me, holds out his hand. I look into his dusty face, look at his dusty legs, dusty arms, and focus my thoughts. I think how much I appreciate his volunteering to ride the whole route, especially the dirt-covered back roads in the back of the open cranemobile with the dust billowing all about. Brian shakes my hand, "Congratulations. I now think it is possible." I shake back, but I am thinking, "Of course it's possible. All you have to do is wave your arms, squawk in the right language, and most importantly, you had to be there when the little guys were learning what their mama looks like."

Even with the loss of 89 and 40, it is a joyous evening as we prepare to camp with our eagle-eluding aerial athletes. Today we covered seventy-two miles, and the cranes flew nearly all of that. It is a time for congratulations and yes, we all now believe, even know, it is possible.

It was only 4:25 p.m. when our birds lit, so I hopped into the Scout and rushed to announce our arrival to our host. Mr. Jenner

turned out to be a silver-haired, slim but healthy, slightly bent, octogenarian. He seems alert and eagerly accepts my invitation to become a short-term craniac. Donning the red cap and an anorak, he walks with me into the field to greet the cranes and my team.

Fortunately, courtesy in America does not require us to join him at tea or him to stay for cocoa. Instead, we share a happy, cordial half hour with all parties gratified and no one bored. My memories turn to a time and a land far away when I



was the only American and the only nondrinker sitting for hours as my Russian hosts drank themselves silly. The words of my acquaintance Professor Vladimir Flint, in some circles considered the dean of Russian ornithology, come to mind. As he raised yet another toast, he turned aside and whispered to me, "Ridiculous Russian custom." Thank heaven for the simple, friendly, courtesy we, as Americans, exchange, then part to our several separate interests: Dave Jenner to counting cattle expenditures, me to a necropsy on 89.

We choose our campsite well. Aged cottonwoods dangle weathered limbs over us, blotting out the hot afternoon sun as we prepare for the evening. The cranes are, of course, interested in the bugs attending each cowpie. Unfortunately, they are even more interested in us. As they poke about camp, nothing is safe from their bill jabs or deposits from the other extremity. Our solution? We erect the net that last night encircled the cranes and use it to close the gaps between our circled cars: people in, cranes out. Tonight, we sleep in the pen. Brian and Curt take it a step further, and arrange their gear on the roof of the cranemobile.

What's for dinner? We need something to celebrate our first day of real progress down the road. First, we have to do the necropsy before it gets dark. With most hominoid eyeballs focused on the hood of the Air Force truck, I make a long incision to see why 89 died so quickly. No broken neck, some bleeding by one ear, looks like the major injury is a broken thigh. I am no vet, but my guess is that sudden death resulted from electrocution when the crane bridged the gap between two conductors. The job complete, I wonder what to do with a dead crane. Matt thinks the feathers are beautiful and wants to save some. Brian comments, "On the farm we ate stuff when it died." My mind slips back almost forty years to a night-time electrical storm at my folks' farm near Steamboat Springs, Colorado. Morning revealed a heap of fifty fryers suffocated in one corner of the chicken house. It wasn't difficult to decide what to do that morning, and it wasn't difficult to decide what to do this evening either. Someone found a can of stewed tomatoes: someone else carved the meat that would stew with it. Later that night, Matt and Curt buried the remains deep in the sandy wash bed fifty yards from camp.

With darkness came the discovery that there really is a good reason why normal people put the sheep in the pen while the shepherd

sleeps nearby. Two very hungry great horned owls showed up at dusk and their preference for sitting on poles within fifty yards of camp prompted us to dig out another net and encircle the cranes also.

Perhaps emboldened by the events of the day, perhaps exhilarated by the tasty dinner, or perhaps just lonesome, Ben broke out his teddy bear. Whereas we had previously caught only fleeting glimpses of this cuddly prize, tonight was Ben's "coming out" party. Tonight Bear was sleeping in plain view right next to Ben. Hey! What's the purpose of a teddy bear if not to brighten one's life? And Ben's courage in not concealing "Bear" brightened our faces as well. Yoshi, head steeped in oriental reserve, was hard to read under these circumstances.

Maybe it was Ben's bear, but that night the climate seemed right for some intimacy, so as we relaxed around the campfire, I suggested we swap stories about our most embarrassing moments. Yoshi, who is really very good in English, told us about a disastrous exchange he had years ago with the intercom at a drive-in, fast food joint. Though he tried again and again, pronouncing "l's" was beyond the capabilities of his Japanese tongue. He simply could not convince the machine that he wanted a vanilla shake. Everyone laughed heartily at Yoshi's predicament, but I secretly believed that either life has treated Yoshi very kindly or he had a few other more embarrassing moments that he wasn't sharing with us.

On the other hand, Brian's story was about as bad as it can get. Seems he was one evening at a munchies and beer party at a private home when to his surprise an absolutely gorgeous girl fell into conversation with him. He stood there, chatting away, amazed that he, generally abashed around good-looking women who normally avoid him anyhow, was able to do so well swapping pleasantries with this beauty. Between turns talking, he happened to set his beer mug on the table next to that of another. When he took it up again, he had a heavy waft half way down his throat before he noticed that he was swallowing not only the dregs of someone else's beer, but also a small number of matches and other ejecta that might be expected to take up residence in a castoff mug. Not wanting to destroy a beautiful moment, he, in an instant, decided not to gag and spit as any normal person would have done under similar circumstances. Rather, without showing a sign of the turmoil within, he maintained eye contact with his newfound friend and swallowed the mug's disgusting contents. The girl, a better observer than Brian, shrieked in disgust and departed posthaste. I guess the moral of the story is that under certain circumstances, it is advisable to gag, even if it may mess up the opportunity of a lifetime.

Not to be outdone by Brian, Matt Shawkey told us of a grade school disaster that nearly robbed him of his last vestige of self esteem. One wintery day, Matt, who had already endured years of abuse by larger, meaner classmates, was late arriving at the bus stop. When he rushed up, the bus was already pulling away, so he charged into the icy street and ran yelling after it. As Matt revealed his painful tale, I could see his classmates grinning from the bus, noses pressed to the glass, pointing and laughing. At length the bus driver got the word that the pencil-necked dweeb wanted to get on the bus, so she slid to a controlled stop. Matt, already running at full speed, had little time to react. He just plopped forward on his face and slid under the bus. My child-hood was not so painless that I could not imagine his anguish as he extricated himself from beneath the yellow behemoth, climbed the stairs, then walked the gauntlet, past row after row of mocking, derisive peers. Glad I missed that one.

Now it was Ben's turn. He didn't want anyone to know his story, but he couldn't let Matt outdo him either. Ben is normally rather loquacious, so I was taken back a bit when with very little introduction he just blurted out that one day at a family gathering . . . well, you know how in the 60s boys used to wear their pants way low, about to fall off, almost like city kids today. Well, his sister by stealth sidled up to him, grabbed at mid-thigh and jerked his breeches down to his knees. We all howled knowing what a shock he must have felt. Then one in the fire-illuminated circle asked the obvious question. And yes, his undies thankfully stayed up.

Others around the campfire took their turn: Each one reliving their shame and the resulting derision. At last it was up to me to see if I could top them all. I should have just let Ben win, or maybe Matt's story was the best/ worst. Ah, who cares, I decided. I'll just blurt it out, then see if they all turn away in disgust.

I began, "Well, some of you know that at age sixteen I broke my back. So I was in the hospital for a couple of weeks before they put me in a cast and during the whole time I never once defecated. Spinal cord damage can change things, you understand. Don't be mistaken. They had fed me laxatives and tried enemas twice, but all to no avail. Well,

uh, one day the very pretty girl came over to my bed. She was a candy striper. Do they still use that term? That's right, a nurse's helper. So this girl comes up to me very friendly-like and I could tell she wanted something and I could tell that I very much wanted to cooperate. By way of excusing myself, I should also say that I was also not so far from death, and if you die, presumably you don't have to be embarrassed anymore, so to get on with it, she asked me if I wouldn't mind if she gave me a 'grease enema.'" This whole incident is still so disgusting to me, I almost couldn't go on. "What she really wanted me to do was let her pass her test on enema giving by having her do it while three nurses watched to see if everything came out . . . er, uh, well, to see if she did okay." By now everyone in the circle could see where this tale of horror was leading, so I just blurted it out. "I said okay she could do it, and she came, and they came, and I rolled over, and she did it, and they watched, but even the grease didn't produce anything."

There, it's done. I look at the faces around the fire: I don't see the barely controlled mirth that came with everyone else's stories. All I see is blank horror, genuine disgust. I guess I won. I think.

Day 5: 6 October. Morning came a bit too early. As we rushed about disentangling our nets and stowing our gear, every so often someone would bark at a crane for stabbing a hole in his pillow or making a deposit on his sleeping tarp.

A slight problem began the day. We were camped in a field about 50 yards, three fences, a dirt road and a railroad track away from the paved road south. Life being too precious to spend on the mundane, I never even considered loading the cranes in the cranemobile and hauling them to the paved road. Rather, I decided on doing a crane "handoff." We proceeded as follows. As the rest of the team distracted the cranes, Matt and Brian moved the cranemobile into position on the paved road. Then we moved the other two vehicles into position in the cow pasture. Up went the flags, and off went Brian's whistle. The two trucks lumbered in a wide arc toward the cranemobile with four of us squawking and waving. The cranemobile, poised at the road edge, began to creep forward. The cranes, excited for another day, postured, then began running and flapping behind. Within five seconds, the two trucks would run out of space in the pasture, but by then the cranes were overhead, trying to catch up with the cranemobile. Spurred on by

the flags and Brian's whistle, the cranes took their cue and dutifully followed the cranemobile down the paved road.

As soon as the cranes passed us, we in the other two trucks folded our "wings," stifled our squawks, and decelerated to a stop just before hitting the fence. When the cranes were out of sight down the road, we headed for the gate, lumbered down the shaded lane, crossed the dirt road, bounced up and over the railroad and onto the pavement. Once on the highway, we quickly caught up with our little migration, moved into our positions as lead and following-cars, contemplated inner peace, and settled into our routine. The radio squawked, "Cranes at 200 feet, speed 33 mph, time 8:37."

At the road edge, a shaggy-headed, wild-eyed, bicyclist pedals slowly up one of many hills. Like us, he must cross the Weaver Mountains and descend into the heat of the Sonoran Desert. I always wanted to interview one of these peregrinating pedalists: little did I know my wish was soon to be granted.

Our route south is mostly through scattered mesquites. We sweep past a cluster of white limestone spires and alcoves. The cranes are pumping along in "V" formation. Five miles go by quickly, and we find ourselves rushing through a tiny burg called Kirkland. There is a sharp left turn ahead, so Matt guns the cranemobile to sprint ahead so the cranes will not be confused as he slows for the turn. After two more tranquil miles (if you call it tranquil to spend your morning waving and squawking to birds overhead), it is "pay-back time." Ben and I spot a golden eagle on a powerline just at the edge of the road. I hand Ben the steering wheel, lean out the window, and focus on the impending encounter. The cranes are lined up in close-rank formation just above the powerlines and are pumping energetically toward the eagle. When the cranes are 100 yards away, the eagle sleeks, stares in disbelief at apparently being attacked by a flock of cranes, then bolts from his perch and flaps rapidly aside. I love to see raptors attack things, but am glad to forego that pleasure today. After the cranes pass, the eagle returns to his roadside perch.

A few more miles slide by and we start a 300-foot climb to the ridge top before descending into Peeples Valley. The cranes are pumping hard. They are not exhausted, just overheated. Bills agape, they come lower and lower as the landscape rises up to meet them. Not much oncoming traffic: that's good. All eyes strain to follow the

cranes. A decision is needed: "Lead-car, pull out left and call them down." Before the plan can be fully executed, the birds begin plopping down immediately at the road edge next to the lead-car. We all walk quickly left calling the birds safely off the road. Yoshi grabs the bucket and jug. Glug, glug, glug... the bucket is two-thirds full and one by one, dominant before subordinate, the cranes dip and point upward, dip and point to refresh themselves. Among birds, only doves and sand grouse can drink without raising their bills. Too bad humans aren't like cranes... it would make for a lot more action at banquets and cocktail parties... dip and point.

A squirt bottle also comes out of my Scout. A lot of heat can be lost through a crane's long, bare legs so, starting with the crane that is panting the most, we spray each pair of legs until the cranes quit panting.

Seven miles behind us, the haggard cyclist wobbles up another nameless hill. None of the craniacs pay him any attention, or if they do, none of them imagine that they will ever, in this lifetime, see him again. Wrong.

The cranes recover quickly. None are fatigued, so we mentally ask them if they are ready to go on. They bustle about and tell us by their body language, "We're ready if you are." The Air Force pickup pulls to the crest of the hill and squawks, "Car coming." We wait. The car passes, the driver looks puzzled at our roadside assemblage, but continues north, cyclist bound. Air Force squawks, "Another car." We wait, the car passes, our short term memory banks erase the driver's wide-eyed visage as soon as he is out of sight down the hill. His long term memory bites deep into what he has just seen.

Air Force squawks, "All clear." Matt guns the cranemobile engine, Brian whistles, and the cranes are all heads up. Everyone slides quickly into his now-we-are-moving mode. It is 9:28 a.m., and we have an appointment with the hot winds rising from the Sonoran Desert.

Our little caravan moves forward. We have some excellent flights behind us, and hours of daylight ahead. It is easy to see the optimism in everyone's faces. We're doing it! I have often noticed that joviality can very quickly produce a superficial kind of friendship, a camaraderie that makes people meet often and do fun things together, while the basis for lasting, heart-melding friendship is true, faithful, and unbegrudging service during times of crisis. This migration would supply a plethora of opportunities for both types of social bonding.