





SCATTERING CHAFF: Canadian Air Power and Censorship during the Kosovo War by Bob Bergen

ISBN 978-1-77385-031-3

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A Fearsome Aerial Ballet

Canadian Forces fighter pilot Maj. Alain Pelletier's thoughts cascaded as he sat in the cockpit of his CF-18 Hornet, its engines idling on a runway in Aviano, Italy, after the tangerine dusk of twilight had darkened around 6:30 p.m. to a deep purple, then inky black, on 24 March 1999. Pelletier was waiting for clearance to lead a package of four Canadian jets on a NATO bombing run into Serbia, marking the first time Canadians had fought in a European war in more than a half-century. Like dozens of other Canadian pilots who would follow over the next seventy-seven days and nights, Pelletier felt inner doubts, thoughts of his family and a dread of the unknown wash over him as he sat alone in his cockpit with little but dead air over his radio. He had spent two decades in the Canadian Forces training for combat, but none of it prepared him for his solitary thoughts in that moment.

"You're: 'OK. I'm ready. Here I am sitting in that aircraft and we'll be launching in a few minutes, but holy shit, you know, we're really going at it."¹ Pelletier's mind raced back to when he signed up with the Forces as an unmarried seventeen-year-old with not a care in the world. "Now, here you are married. You've got kids and a family to care for and you're asked to go into a hostile environment."² Pelletier mentally checked the briefings about possible threats from Serbian forces that awaited the package as it penetrated Serbian airspace. Would the Serbs have anti-aircraft artillery weapons the briefers hadn't anticipated? Would a surface-to-air missile site be placed on a mountaintop to give it that extra reach that could cripple his airplane? What about enemy aircraft? Lt. Col. Sylvain Faucher, commanding officer of 425 Tactical Fighter Squadron, who was to be flying on Pelletier's wing that night, had an entirely different set of worries as he sat on the tarmac waiting to take off. In his mind, he was preparing to go to war, regardless of what the politicians in Ottawa might call it back home. "Let's not be shy of saying it, if I'm going to cross some enemy lines somewhere, sorry, I'm going to war."³

As a pilot, one of his concerns was that, despite the numerous Maple Flag joint-NATO air exercises in which he had taken part at Canadian Forces Base Cold Lake, Alberta, and Red Flag exercises at Nellis Air Force Base in Nevada, nothing compared to knowing he was flying into combat.

You're talking to an individual who was in the Forces for quite a while, who has been looking at many commanding officers (COs) prior to that. All the COs I've looked at in the last—name a number of years prior to that—never showed me an example of how it is to go into conflict. We went to a lot of exercises. We went to Maple Flags. We went to Red Flags and we went to some low-level operations. On the 24th of March 1999, we were about to go to war.⁴

His second set of concerns was for the personnel in his squadron, which is why, mentally, he could not fly lead that night.

I was now commanding a unit in the field that was about to go to war and I had a lot of people to watch over. I had a lot of concerns about a lot of things. At the time, I couldn't concentrate or put my mind on the mission without forgetting the rest of the folks and, by the time the war started, the conflict started on the 24th of March, most of the pilots in the air force were in situ. The staff, or the amount of personnel that we had, was around 350 personnel or so. There were a lot of issues to think about and to consider so that we don't lose people. When I use the term "losing people" in a general sense, I'm going to give you an example. To an armourer who has been putting bombs on a fighter aircraft for the last twenty years of his life, that bomb has been put on and probably dropped on a range somewhere, whether it's in Europe, whether it's in North America, for an exercise. Well that night—or in the next few nights that followed or many nights or the seventy-seven nights that followed—the armourer is now putting a bomb on the airplane and the bomb is not coming back. We had to pay particular close attention to some of these folks because that was an issue, a psychological issue, so that's what I mean by not losing anyone.⁵

In the cockpit of a third Hornet sat a twenty-nine-year-old wingman with 433 Tactical Fighter Squadron, the youngest and most inexperienced of the Canadian pilots flying with Pelletier and Faucher that night. Although fully qualified with 500 hours in the CF-18, the airman's hours were a fraction of Pelletier's 1,600 hours. The expectations placed on him were enormous, but if it was not for bad luck that night, he would not have had any luck at all. While Pelletier harboured his innermost thoughts nearby, a system failed on the junior pilot's CF-18. Although snags—as they are called—are routine, it added additional stress to his first combat mission. The wingman explained:

There's a lot of time built in between the walk time and the takeoff time. You actually spend, if your jet's going when you start, a long time sitting on the ground running. If things don't go well, if you have a systems problem or something, then you have to shut down and run to the spare and then you're in a rush, obviously, in order to make the takeoff time. The jet that I was in started out broke. We had, at the time, a running spare. Someone else had started an aircraft for me and programmed the wave points and everything. All I had to do was shut down, jump from my plane, jump into his, start the left engine and then make sure everything was the way I wanted it. I did make it. I was still pretty busy, as far as where my mind was. I was mostly focused on what I was doing because I just didn't have the time to sit and think.⁶

Capt. Mike Barker, a maintenance officer with 441 Tactical Fighter Squadron from Canadian Forces Base Cold Lake, was on the Aviano air base that evening. He had gone for a walk that night with a buddy to an American mess near the end of the runway. They watched the Canadian CF-18s lift off. The glowing blue-white plumes of their twin-engine afterburners emitted a crackling thunder as the jets soared off the runway. Once the jets were airborne, the afterburners were shut off and the CF-18s disappeared like stars fading in the night. Afterward, reading from a diary he kept while in Aviano, Barker described the fearsome array of NATO coalition warplanes taking off:

From the Victor Loop mess, which was a mess out on the end of the runway, we saw jets lining up—bombed up—and then they started rolling. It kept up for something like one to one-and-a-half hours, jet after jet screaming down the runway. There were American jets; there were Spanish jets; and us; and there were tankers. There was all kinds of stuff there. The British at one point had an AWACS (NATO's E-3 Airborne Warning and Control System) there. I'm not sure if that was there at this point or not, so a couple of F-16s, the EF-18s, F-15s, C-130s, tankers, everything.⁷

Not until the four Canadian Hornets eased into formation were the selfdoubts swirling through Pelletier's mind crowded out by years of training and the familiar routine of being airborne. Pelletier was at home in the cocoon of his fighter's cockpit, thousands of feet above the Adriatic Sea and more than familiar with the lay of the land in Europe.⁸ He was among a mixed cadre of CFB Bagotville, Quebec, pilots with 433 and 425 Tactical Fighter Squadrons who had been flying six CF-18s out of Italy since the fall of 1998.

They generally had been flying three sorties per week in two-ship, four-ship, or larger coalition package formations.⁹ As a result, Pelletier and his Bagotville comrades were skilled at flying in formations with French, Dutch, British, Spanish, and American allies. After less than an hour of flight down the east coast of Italy, the need to refuel in the air put the Canadians into one of two parallel refuelling tracks that led toward an American KC-135 refuelling tanker over the Adriatic Sea in an area roughly east of Albania. As far as the eye could see, warplanes took up nearly the whole of the night sky over the Adriatic in patterns leading to dozens of air-to-air refuelling tankers

Managing that many warplanes in a confined airspace before, during, and after combat missions is a science and a highly choreographed art of war. All of it embodied even the earliest writing of strategic theorist Giulio Douhet, who systematically mapped out the elements of air superiority. The science began at the headquarters of NATO's Air South Commander, Lt. Gen. Mike Short, in Vicenza, Italy. Short's mandate was to use air power to enforce NATO's direction to halt Serbian president Slobodan Milosevic's military and paramilitary's ethnic cleansing of Kosovars and remove those Serb forces from Kosovo. He began with a planning concept known as centralized command and control and decentralized execution. Centralized command and control meant that Gen. Short and his staff were located at Short's Combined Air Operations Centre in Vicenza. There they controlled the decentralized NATO allied forces at the Aviano, Gioia del Colle, Brindisi, and other air bases down the boot of Italy, in addition to those in the United Kingdom and Germany. Battle space management experts and master air attack planners had predetermined the ranges involved from all the bases to military targets in Kosovo and Serbia and threats that might be encountered and parsed up the airspace into manageable bites. All worked to execute the strategic Air Operations Directive signed by Short.

The NATO planners and pilots followed an Air Tasking Order produced by the Chief Master Air Tactical Planner (the Chief MAAP) following Short's air operations directive. The air tasking order identified targets to be struck; the warplanes available; the location of defensive screens; the provision of an E-3 Airborne Warning and Control System, or AWACS; Suppression of Enemy Air Defences (SEAD) capabilities; intelligence, surveillance, reconnaissance; and air-to-air refuelling.

One of the first things the Chief MAAP did was carve out an area of responsibility (AOR) about 60 miles wide by 100 miles deep, roughly over Bosnia near the Serbian border, and assign two fighters to conduct combat air patrols and provide a defensive screen to protect the bases and warplanes in Italy. Depending on the situation, the defensive screen could be two deep or side by side. This night, they were side by side. Behind them, in a similar orbit in its own area of responsibility, was an E-3 AWACS equipped with an array of radars, communications, and data processing equipment and a command-and-control computer able to detect enemy aircraft approaching at low altitudes down Serbian valleys. Personnel aboard the AWACS also controlled all the Allied aircraft taking part in that night's missions. Two packages of strikes took place that night. The first precisely choreographed wave included British bombers, American stealth aircraft, and cruise missiles launched from the British submarine HMS *Splendid* and from the American USS *Gonzales* and USS *Philippine Sea* in the Adriatic.¹⁰ The second strike package involved Canadian, French, and British warplanes.

Prior to takeoff from Aviano, their air tasking order gave the Canadians directives on targets, radio frequencies, and codes. French Mirages bombed targets next to them in the same strike package, with the British operating on the far side in the same package under one commander. The commander planned the package at the main planning area in Aviano, with the Canadians, French, and British all in the same room. The pilots were assigned altitudes, transit routings, and designated marshalling areas in which they gathered at precisely calculated times before entering Serbia, along with timings for which planes were striking which targets and when.¹¹

Once airborne from Aviano, the pilots were handed off from the air traffic control tower to controllers circling near Serbia in the AWACS. Although the Canadian CF-18s were loaded with 16,000 pounds of fuel in Aviano, they burned 1,500 pounds during taxi and take-off or about 1,000 pounds per minute in full afterburner. They burned another 5,000 pounds per hour in cruise, or about 10 pounds per nautical mile flown. With a 500-mile flight to their targets, one of the pilots' first jobs was to refuel midair with another 6,000 pounds of fuel en route to their targets as far south in the Adriatic as possible. That was enabled by an elaborate battle space management plan. Lt. Col. Kirk Soroka, the 4 Wing Operations Officer at CFB Cold Lake, Alberta, who was a CF-18 pilot during the Kosovo campaign, described it as possible to think of battle space management as a ladder superimposed lengthwise over a map of the Adriatic Sea, with its rungs forming six individual "boxes" or areas of responsibility at precisely designated Global Positioning System (GPS) locations. The long left rail of the ladder down the Adriatic close to the eastern coast of Italy behind those individual AORs was an air transit route code named Backstreet. Inside each AOR in the ladder were air-to-air refuelling tankers like flying gas stations. Each airspace was assigned north-to-south code names: Elf, Sonny North, Sonny South, Shell, Johnson, and Mobile. Each individual airspace can be envisioned as a massive three-layer cake. At each layer was a refuelling tanker such as a Spanish Hercules, a French 707, or an American KC-135, or a combination of them at different altitudes. In that airspace control plan, a Spanish Hercules flew a circular counter-clockwise orbit, or tanker track, at 16,000 feet, a French 707 orbiting counter-clockwise at 20,000 feet, and an American KC-135 orbiting counter-clockwise at 25,000 feet. This is known as a tanker stack.¹²

As the warplanes flew down Backstreet to their assigned tanker tracks, the pilots were in radio contact with a controller in the AWACS. Generally, they approached their assigned tanker about 10,000 feet above, descending to 1,000 feet below it and about a mile behind. En route to the mission they entered the gas station box through a GPS position known as the "Window" on the northwest corner. Each refuelling track was set up the same way, with parallel air corridors or "Alleys" between each box like rungs on the superimposed ladder. While the approach to the refueller at the northwest corner of the gas station was called the "Window," the exit on the northeast corner of the box was called the "Porch."

Soroka explained that if the pilot's radio call sign was "Dirk 11," the tanker's "Exxon 35," and the AWACS "Magic," the conversation between the pilot and the AWACS as it entered the refuelling track through the "Window" would go something like: "Dirk 11. Flight Exxon 35 is BRA (Bearing, Range, Altitude) 180 (degrees) for 25 miles at 20,000 feet. Call radar contact." The pilot would reply: "Dirk 11. Radar Contact Exxon 35." And the AWACS would say: "Right, you are cleared to switch boom to contact Exxon 35. Contact Magic prior to exiting at Porch."¹³

Soroka explained the process:

Because we hadn't crossed enemy territory yet, all of our lights were on so we would see where we were at night. So once we had radar contact, talking to Exxon 35 they would clear us astern. So we would pull up about a mile behind him, in formation, and then he would clear us to move to the echelon, in formation, depending on which airplane we were going on. (An echelon is a military formation which, in this case, aircraft to follow one another in an offset pattern). As we went out to the echelon as either a two ship or four ship, the lead, the number one aircraft would be closest to the tanker, then number two, number three and number four. The lead would be cleared astern the tanker, the lead would say: "Copy clear astern." He would fly to the right behind the boom and would be cleared to wet contact. He would say: "Copy wet contact." Then he would add power and put his fuel probe in the KC-135's funnel-like drogue. Once he got his gas, the airplane would stop giving him gas. The lights—which are either red, amber, or green—the light would turn red which means you're cleared to disconnect, or they will tell you to disconnect. They would say: "cleared echelon left." The lead would say "copy that," and go to the other side of the airplane. And they would say: "Number two, you are cleared astern. Clear to wet contact." The whole formation went through. When everyone got their gas, the tanker would read out what fuel we took on board. We would respond with our tail numbers so the appropriate nation would get the bill for the fuel and the tanker would say you're cleared to climb straight ahead. The formation would leave the tanker about 1,000 feet above it and head towards the Porch, switch frequencies to Magic and then move to the next stage of the flight which was to the marshal part of the push.14

To the north, over Hungary, a second smaller set of refuelling tracks— Texaco, Gulf, and Conoco—supported other Allies' strike missions, under Short's Air Operations Directive. Once refuelled, Pelletier and the Canadians continued through the Porch, exited the gas station box, and flew over Albanian airspace, eventually positioning themselves in a circular holding pattern flying at a predetermined GPS marshalling point and at four predetermined separate altitudes over Macedonia where a strike package of twelve other NATO warplanes was similarly marshalling a few miles back from timing reference points (TRP). Each formation would leave their marshal point to hit their timing reference point at an exact time that would allow them to fly into the target area and deliver their weapons on a predetermined time on target (TOT).¹⁵

Given the signal from an airborne air controller, the four Canadians established their attack formation with the other NATO aircraft flying north over the Macedonia/Serbia border on their way into Serbia. Serbia is not a big country by Canadian standards: at 88,631 square kilometres, it is only a little larger than Lake Superior. Kosovo is tiny; at 10,887 square kilometres, it is about half the size of Lake Ontario.¹⁶ The package the CF-18s were in was divided into western and eastern elements. Pelletier led the four Canadian CF-18s flying single file and the eastern element as a whole.

Within a heartbeat they were in hostile territory preparing to launch 500-pound laser-guided bombs onto a predetermined military target, a Serbian military base. In a CF-18 engaged in a running procedure on a target three minutes away, combat activities occur in a matter of seconds. As they closed on their target, Pelletier saw anti-aircraft artillery fire, or triple-A, arcing in the night sky toward his formation.

You're seeing triple-A coming up and then you're wondering still, hopefully, is everything we were told about this, the maximum height of the triple-A is that accurate? So you take a quick look. Where is it directed? It was pretty much a barrage fire, nothing really directed at something specific. They knew that we were coming and they were trying to put up stuff in the air. So we saw it and kicked away from the position.¹⁷

Some sixty seconds after the triple-A fire, the CF-18 pilots received a radio warning from the E-3 AWACS that two Yugoslav MiG-29 Fulcrum fighters were closing in on them sixty miles off their nose. Pelletier explained: "Initially, you see it on radar. Obviously, nobody's got lights on over there because it's a war and so you don't see it visually until somebody fires a missile or until an aircraft gets shot down."¹⁸

As formation commander, Pelletier had to make split-second decisions. His package was over Kosovo moving north toward Serbia.¹⁹ Royal Netherlands air force jets flying combat air patrol missions in support of the eastern arm had also picked up the AWACs surveillance signal. The CF-18s also were quickly closing in on their original target 30–35 miles away.

We were close to our decision range. OK. Do I press to the target? Do I engage the airborne target or do we turn and let the Dutch handle it completely? Just before I had to make the decision to abort the attack and make a formal commitment on that group of aircraft, the Dutch were successful in shooting one down and getting the other one to turn around.²⁰

Within seconds, the next thing Pelletier was aware of was the fiery exhaust of a surface-to-air missile streaking through the night sky in their direction.

We had no indication, initially of the missile coming up, except for the visual pickup, which is easy at night because you see bloom of the missile exhaust coming toward you. Since we were the leading edge of the eastern element, the eastern arm, we could see that it was actually targeted towards us. We did a quick inventory of the spike, we call it, of what the radar warning receiver tells us at the time. Nobody was calling anything threatening, so I made the decision to kick the formation away-not away as to turn around-but to put a vector that would increase the distance between us and the site launch. Looking at the missile, we finally decided that it never made it to the formation. It was one of those lucky shots that didn't turn out lucky for them, but it was like, the first thing you think about was: "What is the best course of action?" After that the training starts kicking in. You do a quick inventory, attempt to put the formation into a defensive position and assess again. It was just one thing after the other. You react to the triple-A, you react to the SAM, and then you start thinking about the target things.²¹

As with Pelletier, once Faucher became airborne over the Adriatic, the job at hand overtook everything else.

At takeoff you become one with the airplane. You forget the rest of your problems in life because you've got a mission to do and everything becomes second nature. Because of the training we did, you're one with the airplane and the procedures, tactics, etc., really sink in and you're just flying and reacting. That night by the time the picture got clear, all these inputs, all these images coming in, well now you know what to expect. You know how to deal with it and we had a job to do which was dropping bombs.²²

Faucher recalled the very minute when he felt all the years of training gel. That was ninety minutes into the mission, when the Canadians received word that enemy MiG fighters had been spotted on radar headed their way. "That's where your questions about all your training issues and the questions you've been asking yourself for the last hour and a half are answered because the co-ordination, the command and control identified these folks."²³ When the Dutch F-16s engaged those enemy planes, a picture emerged of what it was actually like to be in combat.

It all adds to the picture that you see which is missiles firing, bombs dropping and, of course, airplanes like our F-16s firing missiles at these MiGs. I remember seeing that twitch in the sky, which after the fact, I didn't know what it was, but now I know. It was the missile impacting the first MiG and then becoming, slowly but surely, a big shooting star until it crashed right in front of us at about eight to ten miles. At two o'clock or at about the same location, there was a missile launch prior to the crash and that's when we quickly realized that these Serbs had a different tactical approach.²⁴ Faucher recalls that the 30–40 seconds after the release of his first 500-pound laser-guided bomb seeming like an eternity. That release was the culmination not only of flying into combat but of a harrowing period of trying to identify pre-designated targets on a Forward Looking Infrared (FLIR) pod screen. That display sits on the top left of the CF-18's cockpit array. The roughly 20-centimetre by 20-centimetre digital screen is surrounded by an array of twenty buttons or tiles that let the pilots call up the different functions as required. When the pilot engages the FLIR functions, their infrared sensors identify physical features on the ground miles in the distance and display them as greenish images on a dark screen. The pilots can toggle between a wide display and a close-up four-power magnification display. A selected target can remain locked on the screen even as the pilot approaches and passes over it at hundreds of miles an hour.

What the pilots must do on a bombing mission is find their targets up to ten nautical miles away from an altitude of 20,000 and 25,000 feet by comparing actual features seen on maps programmed into their computers. Once a pilot is certain he has the target, a bomb is released. The pilot guides it onto the target on his screen, during a flight that can take up to forty seconds, through a laser designator, a computer joystick on the lefthand side of the cockpit, precisely at the same time as he manoeuvres the plane at combat speed with his right hand on the flight control joystick. For all the four-power magnification, the targets on the ground appear as flecks of light on the FLIR screens.

You have to use those laser-guided weapons, put them in the right place at the right time, and during that time of flight, which, depending on where you drop, could be anywhere from thirty to forty seconds. There's not much you can do. You don't want that bomb to go astray on the civilian population somewhere else. At the same time, you'd like to be able to deal with whatever other inputs that could be dealing with you so you try to stick your bomb.²⁵

Once in the air, Pelletier's and Faucher's wingman slipped into the routine of flying, but nothing could have prepared him for Serbian airspace. He described it in apocalyptic terms:

There was plenty to see from the fires from the bombs going off, the whole western air force is basically dropping bombs on this country and it looked like, basically, it looked like hell. You know, there's black on the top and orange on the bottom, like the whole ground is burning. It was kind of difficult to tell what's fire, what's AAA. There's just fire everywhere.²⁶

Flying last in the formation, the wingman could see the aftermath of the Dutch F-16 engaging the Serbian MiG.

I heard the communications, but I didn't see anything until I saw an explosion on the ground. I saw kind of a fireball and it caught my eye and I looked over thinking, "SAM launch." Then I kind of reflected on the communications that I'd just heard and realized that it was the MiG that had just been shot down and the fireball that I was witnessing was the explosion of the MiG hitting the hill.²⁷

The wingman also glimpsed what it was like to be on the receiving end of being engaged by the enemy. After three CF-18s had dropped their bombs on target, he picked up an electronic warning of a missile launch.

Basically, after the target, I got an indication of a SAM launch. It was on me. I didn't see any SAM launch, it may have been ambiguous with a friendly threat radar that caused that indication, but unlikely. I kicked away from it. I deployed chaff and despite it, it came back again and I did the same thing again.²⁸

At one point, the wingman said, he fell behind the formation. "I do remember getting stretched, like falling behind, due to I can't remember what, and turning around a corner and not being able to catch up. I'm basically at full power without the afterburners and not being able to catch up."²⁹

If that was not enough on the first night of combat, the wingman admits he was the only one of the four who wasn't able to successfully drop his bombs that night.

I was not able to ID the target. I felt horrible about it. What I just went through, terrifying as it was, terrifying, pushing across the border, I'm like: "This is it." I mean my heart's just going a million miles a minute and I'm thinking: "This is everything I've done, every ounce of training I've done so far has led to this moment." And then I come home having, you know, bringing my bombs back and it's just a, it's just a horrible feeling.³⁰

The mission was far from over when Pelletier and his fellow pilots touched down on the runway back in Aviano. It and every other mission that followed concluded with debriefing sessions. The pilots met first within their own group of four and then with the squadron's intelligence officers to report on the success of the attack. Two of the pilots had hit their targets, one missed his target, and one didn't drop his bombs.³¹ They had to review cockpit film of the attack on their target, the threats they encountered, and whether there had been any attempts to jam their communications. Only afterward could they reflect on what they had just done. Each saw it differently. Pelletier later remembered: "You really think about this. Hey, first of all we went through it, survived the threat that was out there. You think about it. You think about the positive outcome, but mainly you think about your decisions with regard to those actions or inputs you received in the air and whether they were the right ones."³²

Faucher recalled that all of his self-doubting questions were answered.

Is this whole thing going to work? By the time you cross enemy lines, the missiles start flying, airplanes start shooting other airplanes and you go: "Well, I guess what we've been learning really works." It was extremely well synchronized and the stuff that is in the books in terms of co-ordination, command, and control and so on and so forth, was really arriving, was really coming to reality, just like clockwork. It was amazing, a ballet in the sky, by the book and you go: "Well, I guess we're doing something right."³³

The less experienced wingman was left to agonize over being the only one to not drop his bombs.

I mean I don't think it was a hugely high-priority target. That may have been some of the comments made by some of the other pilots—that we were often fragged against low-priority targets rather than going for the head of the snake. That's kind of a political thing that I, as a wingman, was not really, caring too much about at the time. I mean, obviously, my one hope in life that night was to hit the target and it was just heart rending not to be able to do it.³⁴

While the wingman agonized over his failure, his commanding officer (CO) Faucher was singing his praises.

I'm never going to blame anyone. As a CO, I was never going to blame anyone and say: "You didn't identify the target." You just come back with the damn bomb, which he did, of course. That was the greatest thing on the planet that night because it showed that the guys were professional. They were not anxious to drop anything even if it was the first bomb of his life in a conflict. We were there for a mission and if it didn't work the way they wanted to, they were going to come back and do it the next day. The guys were not going to risk anything, whether the lives of the folks on the ground or their own, for no stupid reason.³⁵

Meanwhile, Canadian CF-18 pilots and ground crew from CFB Cold Lake were all over the world. They were ordered to reach Aviano, as soon as possible by any way they could. Now-retired Lt. Col. William Allen Flynn—call sign "Billie"—commanded Cold Lake's 441 Tactical Fighter Squadron and led an advance party to Aviano on March 20 to replace 425 Tactical Fighter Squadron from Bagotville. Within three days of his arrival, his Cold Lake pilots were being integrated into the operational team. Flynn recalled there were twelve Bagotville pilots and eight Cold Lake pilots in the beginning. "Once we realized we were in for a longer haul, the Bagotville pilots in place were rotated out by Cold Lake 441."³⁶

One of those 441 Squadron pilots, then-Capt. Kirk Soroka, was in France the morning of March 24, when he received a phone call to report for duty in Aviano as soon as possible. Soroka was in France to co-ordinate 441 Squadron pilots' involvement in Exercise Brilliant Foil, a massive exercise involving about 300 jets that was to take place over the English Channel in the first week of April. Soroka had been working with the French air force on the exercise for a year and had planned that the Canadian planes would arrive at the Soesterberg Air Base in the Netherlands on March 27. "We were going to be like coalition forces against coalition forces where there'd be blue forces versus grey forces and there would be about 300 jets flying at any one time. It was going to be an awesome exercise."³⁷

Those plans went out the window with the beginning of the NATO bombing campaign on March 24.

I told the French air force that the Canadians were withdrawing from Brilliant Foil on the morning of the 24th and I reported down south [to Aviano]. A few days later the jets showed up in Holland and sat there. There were six ships sitting there waiting for orders to either come back to Canada or swap out with the jets in Aviano which was the intent of Brilliant Foil.³⁸ We would finish the exercise then my squadron was going to take over in Aviano from 3 Wing or 425 Squadron. Their planes would go back to Canada and our planes would step into the fight.³⁹

Soroka arrived in Aviano by a commercial flight as the first wave of Bagotville pilots was dropping bombs in Serbia. A Bagotville pilot, who goes by the radio call sign "Tubs," was 433 Tactical Fighter Squadron's weapons and tactics officer when the war broke out. He was at home in Bagotville when he received a phone call March 23 to catch a commercial flight that would take him to Aviano. He had spent about eight months in Aviano previously in various rotations and was on ready reserve when the phone call came. "I was on notice to move, so when it looked like it was going to happen, I just hit the airport and off I went."⁴⁰ Twenty-four hours later, he arrived in Aviano and watched the first four CF-18s led by Pelletier launch into the evening sky. The policy was that he had to have thirty-six hours of down time after a trans-oceanic flight, so he was unable to fly his first combat mission until night three of the air war.

441 Squadron pilot Capt. Brett Glaeser, who goes by the radio call sign "Laser," recalls vividly how he received notice to report to Aviano. Twenty-seven-year-old Glaeser was at home at Cold Lake having dinner with his wife and another CF-18 pilot and his wife on March 25. They watched news of the aerial bombing campaign unfold on television.

What was memorable for me: We were having dinner, watching CNN and our wives were kind of giving us a hard time because we weren't really paying attention to the dinner conversation. We were looking over our shoulder at CNN, what was going on. When the bombing started I just remember them saying: "The United States has attacked Serbia. Bombs are falling." We both, him and I, both stood up and walked over. We were glued to the TV for about a half an hour and then we decided we better go back and eat with our wives. So, we go back to sit down and no sooner did I sit down than the phone rang and it was my CO over in Aviano. He said: "Laser, can you and Brass, which is another guy in my squadron, can you two guys get an airplane as soon as you can, or get two airplanes and bring them over as soon as you can? We want you guys to come over right away." So the next day we were in to work, we took airplanes and left.41

Glaeser, a newly qualified combat-ready wingman, had been with the squadron for only about ten months and knew his rookie status compared to other, more senior pilots. He was in the process of upgrading his qualifications, but he hadn't yet qualified to lead a two-ship element or four-air-craft formation into combat.

I was being sent over into a combat environment as a wingman basically, so I was a confident, capable wingman, not a qualified lead yet. I was totally happy to go, like pumped up. All the guys I flew with I totally respected. They had way more experience than I did. At the time, my squadron, 441, had so much experience on the CF-18 it was ridiculous. The average hours flying time on squadron at that time was probably 1,500 to 2,000 hours in the airplane. I was one of the least experienced guys.⁴²

The other 441 pilot that Glaeser's commanding officer Lt. Col. Flynn mentioned in his phone call to Glaeser was Capt. Travis Brassington—"Brass." Brassington remembers everyone thinking that the bombing campaign would only last three days and by the time they arrived in Aviano they might miss the action. "We thought we were going to miss it and then it would be over. In fact, we thought they wouldn't even let us land at Aviano because we had visions of wave after wave of airplanes taking off and landing and that they wouldn't be able to tell us to land."43 Brassington and Glaeser married up in the hangars on March 26 with another CF-18 pilot who was to fly a third CF-18 with them as far as Goose Bay, Newfoundland, as a spare, in case one of the jets "snagged," or became unserviceable. Brassington recalled both the feeling of uncertainty he had and the emotions he was experiencing as they prepared to taxi their jets for takeoff. "We didn't know what was going to go on. When we taxied, I actually asked for a taxi with ground here because it was pretty emotional. I said, you know: 'Hey ground. Taxi three Hornets for God, Queen and country.' And off we went."44

With all of the US refuelling tankers tied up with America's own strategic lift and combat needs, the pilots had to rely on the least two preferred options to fly their CF-18s to Aviano: air-to-air refuelling on a Hercules and island hopping. They left Cold Lake and air-to-air refuelled off a Canadian C-130 Hercules, which let them fly to Goose Bay, Labrador. From Labrador they flew to Keflavik, Iceland, where they stayed overnight. From Keflavik they flew to Ramstein, Germany, via Kinloss, Scotland. They couldn't fly directly from Germany to Italy because a landing couldn't be scheduled due to the bombing campaign. Instead they stayed overnight in Germany and eventually flew into Aviano on March 29 after three days of flying. Glaeser remembers the sobering evening he and Brassington spent on March 27 in Iceland when the reality of heading off to war finally hit home.

Normally when we go on the road and we land somewhere it's, you know, we'll go out for dinner. We'll kind of go out late. This night we were just like, "Nah. let's just have dinner in the hotel and just hang out in the hotel." We started watching CNN again. There wasn't really anything special going on, so we decided we were going to go to bed early because we had a big day the next day. Then, as I went to bed in my room, CNN came on and said: "The American F-117 has been shot down. The stealth fighter has been shot down." I immediately went back to Brass's room and I said: "Did you see that? I think a Stealth just got shot down." We were both like, there was a moment of clarity. We were both like: "Oh my God. We're actually going in. This is for real you know." At that point it was like: "All right. This is real. This isn't just a game. That airplane's supposed to be, it's the Stealth fighter, come on that airplane's supposed to be fairly hard to detect and shoot down. How did they do that?" The fact that we're bringing F-18s over, it was just like: "OK. We're really going to have to be on our game." I called my wife right away and said: "Did you see that? The Stealth got shot down." She's like: "Yeah." But we never questioned the fact that we were going to do our job.45

Upon arrival in Aviano, one of the first people pilots like Glaeser and Brassington had to talk to was Soroka, the Canadian pilots' expert on survival training. Soroka was referred to by his colleagues by his call sign "Rambo." Pilots' call signs are picked for them by their colleagues. Soroka was tagged with the "Rambo" call sign because he is an ex-infantryman who spent six years with the 3rd Battalion Princess Patricia's Canadian Light Infantry before joining the air force as an officer cadet in 1989. Tough as nails, Soroka took advanced combat training, learned how to parachute from transport planes, and trained in jungle warfare in Panama and in winter warfare in Alaska in January. As the squadron's combat searchand-rescue officer, his biggest concern was that the Canadian pilots had never trained in combat search and rescue and didn't have the capability to recover and extract a pilot shot down by the enemy.⁴⁶

Soroka had identified escape-and-evasion problems in the Canadian air force long before the bombing campaign began, starting with their standard-issue blue flight suits. About the same colour as blue jeans, they had bright zippers and patches. They were the transport aircraft pilots' flight suit of choice, but no fighter pilot who could be forced to bail out deep in enemy territory was comfortable with them. They were dangerous. They stood out. The other problem was the survival pack in the CF-18 seat, which would hang by straps below the pilot in the event of an ejection. Soroka discovered its problems when he took escape-and-evasion training in the desert in 1998 with Americans out of Holloman Air Force Base, New Mexico. For two days, he had to avoid a hunter force of fourteen with search dogs. In the seat pack was Lypsyl[™], Kleenex[™], fishing line, glow sticks, and, originally, a little beacon that was replaced by a radio. The first and major problem with the seat pack was its colour. Soroka explained: "It was all based on peacetime survival in the boreal forest, maybe even the Arctic. Everything was wrapped in bright orange shiny tinfoil. When I was down in the desert, any time I took it out, I was afraid that it would be like a mirror and the enemy would come get me. So, I buried it and left it."47 The other problem was the radio's location in the seat pack. The radio had to be on the pilot's body, because during ejection, if the seat pack line snapped, all the survival equipment, including the radio, would be lost.

Upon his return to Canada, Soroka reported on what pilots needed in their search-and-rescue packs, based on Canada's NORAD and NATO commitments. Among the recommendations was that pilots needed survival equipment sufficient for three days, including water pumps and radios that could be carried on their person in a combat vest. His recommendations went to the Canadian Forces Aeronautical Engineering and Test Establishment (AETE), which started developing the vest in 1998.

The first problem to be rectified was the blue flight suits. In 1998, the CF-18 fighter squadron commanders in Cold Lake and Bagotville bucked the chain of command and ordered green Nomex[®] fire-resistant flight suits

used by the US military.⁴⁸ The chain of command was displeased. Soroka explained: "We were told that we could wear these flight suits interim only. When they basically wore out, you could start wearing the Canadian ones. Well, guys are still wearing them five years later, because they refuse to wear the issue."⁴⁹ The seat pack and its contents, however, remained a bigger problem. Soroka recalled that, more than a year later in Aviano, "when the shooting started, pilots were still flying with the peacetime boreal forest seat pack, the Lypsyl[™], the Kleenex[™], the tin foil wrapping and the bright orange bags."⁵⁰

There was another set of search-and-rescue problems: the radio in the seat pack. With no indigenous rescue capability, the Canadians would have to rely on their allies, but their radios were incompatible with NATO allies' equipment. The Canadians needed PRC-112 combat search-and-rescue radios, complete with internal global positioning systems.⁵¹ An alternative to putting their survival radio in the seat pack was to put it in one of their flight suits' leg pockets, but that wasn't much of a solution at all, because during ejection, that was likely to be lost as well. They needed proper, robust combat vests.

The radio problem was the first to be rectified in theatre. It began with a phone call to Brig. Gen. David Jurkowski, the Canadian military's Chief of Staff, Joint Operations, in Ottawa who phoned the Challenger flying unit, gave them his (government) credit card number. He ordered them to fly to the manufacturer's location and to buy forty of the radios and have them delivered. A day-and-a half later the pilots were training on the radios and flying with them. Brig.-Gen. Jurkowski recalled that, in Ottawa, they were vaguely aware of the search-and-rescue radio limitations but acted quickly when asked for the PRC-112s.

We kind of suspected they weren't there before but, you see, you throw away the plans as soon as you go to war or as soon as you go into combat. You develop things. There is a requirement that pops up that nobody thought of before and so you fix it. You get onto what the hell it was that you need to do. In terms of search and rescue, of course, the Americans basically were the only ones with a robust capability; therefore, we had to be one with them in equipment.



1.1. Captain Kirk "Rambo" Soroka outfitted in a new green flight suit, a laser visor and new combat survival vest he argued was necessary to carry out search and rescue radios mission in the event a pilot was shot down. To his left is a 500-pound GBU-12 Paveway II laser-guided bomb. Photo courtesy of the Department of National Defence.

But it was fixed, you know, that's why you have a task force commander on the ground. $^{\rm 52}$

At the same time, Soroka called the AETE staff in Canada, saying, "We've got to get these vests over there now. We needed them yesterday."⁵³ Soroka flew his first combat mission from Aviano on the night of April 3 and was in Aviano when the PRC-112 radios arrived, with four of the urgently requested combat vests arriving the third week into the campaign. Once they arrived, two problems had to be resolved immediately. None of the pilots had ever worked with the radio before or trained with their allies on the NATO search-and-rescue protocols. Although everyone knew that an American F-117A Nighthawk Stealth fighter had been shot down, there wasn't a structured search-and-rescue training plan in Aviano. The solution was to have Soroka arrive early on the days the pilots planned their flights and brief his fellow pilots as best he could.

I would come in early and I would grab a vest and I would look and if I hadn't talked to a pilot yet, I'd say: "OK come with me." We'd sit down on a couple chairs and I'd say: "Here's your vest. You just got shot down in Serbia." I'd show him on the evasion map where he was and I'd ask him: "Okay, so talk me through what you're going to do." And that's how I taught them. I also confirmed that they learned the information they needed to know.⁵⁴

The second problem was that the AETE staff had manufactured only twenty of the new combat vests. The pilots had to pair up with someone the same size who flew on an alternate day. That was possible because each pilot flew one day and planned flights the next day. To say that the CF-18 pilots were as confident as Soroka in their ability to carry out their own rescues vastly overstates the case. It became a running joke in the preflight briefings. One pilot said, "We used to say, 'If I get shot down, your job is to shoot down Rambo, so he can come and save my ass."⁵⁵

On a more serious note, the prospect of getting shot down still weighed heavily on the pilots' minds. Canada had not declared war on Serbia, a fact that had important legal implications for pilots shot down and captured. One pilot explained:

As pilots, we could have benefited from what's associated with being at war but we were never given that. In fact, the government never admitted that Canadians were at war. Based on the laws of armed conflict and war, if I'd been shot down after attacking a sovereign nation, I'm essentially a criminal. If I was at war, I'm entitled to the protection of the Geneva Convention and that was something that, depending on where you were shot down, determined how you were treated. If you were inside Serbia, you claimed POW status. Outside of Serbia, you claimed mission specialist status. I didn't know what mission specialist status meant, but that's what the guys were told to say. That's what was written down. To me that was the most terrifying thing.⁵⁶