WHILE DRIVING THROUGH DOWNTOWN Mountain Home, Idaho, on a gray February morning, I notice something troubling: Mountain Home has no mountains. Later I learn why. In the 1880s, the town was relocated. Its original site was an Overton trail stagecoach stop called Rattlesnake Station. A post office, a farmhouse, and a few clapboard structures were nestled in the foothills of the Sawtooth Range, where snowy peaks soar above 10,000 feet. The outpost served a gunslinging clientele of trappers, miners, and explorers, and, true to the romance of the American west, survival there required a will and an ability to fight. But in 1883, the Oregon Short Line railroad laid tracks seven miles southeast, on the Snake River Plateau. A more comfortable life beckoned, so the town moved. And that’s when Mountain Home lost its soul.

THE LAST GUNSLINGER

THE F-15C IS THE ONLY DEDICATED DOGFIGHTER LEFT IN THE U.S. MILITARY FLEET. WHY ISN’T THE AIR FORCE REPLACING IT? BY MICHAEL BEHAR

Over Its 35-year career, the F-15C (here on a training mission over the Pacific Ocean) remains the air combat champ, with 104 victories and no losses.
It’s rebirth began in August 1943, when the U.S. Army Air Forces built an airfield on the outskirts of town to train B-24 Liberator crews. Soon the base expanded, until it encompassed 134,000 acres. In 1991, the F-15 Eagles arrived. Built by McDonnell Douglas (now Boeing), the F-15 made its first flight on July 27, 1972, and the C model remains the only fighter in the U.S. arsenal designed exclusively for air-to-air combat. Its pilots have restored to Mountain Home the sensibility of the gunslinger, whose singular pursuit leaves no safety net: It’s kill or be killed.

But after more than 30 years in service, the F-15 dogfighting is becoming an endangered species. To blame are the multi-role, fifth generation Lockheed Martin F-22 Raptor and F-35 Lighting II. By 2025, the ambidextrous multi-roles, along with unmanned aerial vehicles (UAVs), will have replaced all F-15Cs, a drawn-down that’s already under way. Some F-15Cs are headed to the Air National Guard; others are being cannibalized for parts. A handful of pilots will get reassigned to the F-22, but an unlucky few might end up holding the joystick controlling a UAV, or grounded at desk jobs.

For their part, Department of Defense wonks claim that America’s enemies reside in caves, unreachable by aircraft. F-15 pilots see it differently. The threat of an airborne attack has diminished, they say, precisely because the Eagle has maintained air dominance over the battlefield for nearly four decades. “We are a victim of our own success,” says Lieutenant Colonel Jim Stratton, “we’re all better off.”

Stratton, 42-year-old Lieutenant Colonel Jim Stratton, is the commander of Mountain Home’s 390th Fighter Squadron, one of four under the 16th Fighter Wing. “We’re taking on more risk because some elements within the DOD assume that air superiority is going to be a given.” Stratton has flown combat missions in Kosovo and Iraq. To his dismay, his entire squadron—21 F-15Gs and 11 fighter pilots—will be disbanded by September.

F-15Cs require 11 hours of maintenance (above) for every hour of flight. Mountain Home’s F-15C pilots often train beside F-15E Strike Eagles. “At the end of the day,” says Lieutenant Colonel Jim Stratton, “we’re all better off.”

Now you’d think the Eagle top guns— the pilots refer to each other as “Bros”—would be hankering to get behind the stick of an F-22 (and eventually an F-35, due in 2016), with all its “Gucci” technology, as 29-year-old Captain Benjamin Leestma puts it. But they’re not. “The thing is, in multi-role fighters there is so much information that you have to weed through to get to what you really care about,” says Leestma. Mountain Home’s chief of weapons and tactics. Pilots like Leestma joined the Air Force to fly the legendary F-15C. “I have spent six years working my tail off to get to the point where I am,” he says. “The jet is a twin tail, twin-engine, combat-proven, air-dominant fighter. Being single-seat allows me to make and execute instant decisions without coordinating with another crew member. In my experience, the speed at which the pilot can make and execute decisions is often the key to success in air-to-air combat.” Leestma concedes that the F-22 and F-35 are indeed all, do-all workhorses, but complains that the pilots flying them rely too much on gadgetry and too little on grit. The Bros are a vanishing breed, bemoans another Eagle pilot. And they warn that mothballing F-15s while not pursuing a multi-role programs won’t spend long hours flying dogfight scenarios. Stick time is limited—operating an F-22 costs $50,800 an hour, compared to $31,800 for an Eagle—and there are just too many other systems, procedures, and missions to master.

The fifth generation argument is that pilots will eliminate the enemy before having to engage at close range. “At the end of the day, if you are dogfighting in an F-22, lots of mistakes happened in the previous 80 miles,” says Stratton. But mistakes do happen. Stratton also worries that those who fly the multi-roles aren’t hardened for air-to-air combat. Of his F-15C Bros, he says, “We attract a certain portion of the population to the job, guys who bring that controlled aggression and cunning and desire to never lose, no matter what the odds are.”

**LAST YEAR I WENT TO CUBA** and for two weeks drove 1,100 miles around the island. No doubt you’ve seen photos of the vintage 1957 Chevys there, those pre-Castro leftovers that roam the countryside in mint condition, engines purring, as if they’re fresh off the lot. Had a chance to inspect one of these stately gems up close. Its owner showed me how he had retrofitted his with a diesel motor from a Mercedes-Benz, and installed air conditioning and a thumping audio system. Surely Chevy’s engineers never envisioned the kinds of modifications that have kept this classic alive in Cuba for a
half century. But its sturdy frame, mod-
ular architecture, and generous engine
compartment left ample room for mod-
ernization. The story of the ‘57 Chevy
is the story of the F-15 Eagle. Straton
walks me out to the Moun-
tain Home flightline, where an icy wind
seems the tarmac. F-15Es are aligned
like sentries, their wing pylons laden
with air-to-air missiles. Maintenance
crews scurry from airplane to airplane,
checking and rechecking avionics, engine
spares, hydraulics, control surfaces, and
weapons systems.
We approach Stratton’s F-15C where
a fresh-faced kid has just finished hand-
polishing the landing gear assembly. He
sees us coming, jumps to his feet, and
acknowledges Stratton, his com-
manding officer. I follow Stratton up
an aluminum tech-
nician’s ladder. He
dives into the cock-
pit while I stand on
the ladder’s top
rung. “Don’t touch
anything,” he warns.
“You could arm the
weapons system.”
The dials and
knobs are decrepit; nearly every painted surface is scuffed and chipped. The control stick looks like it might have been dragged behind a trac-
tor for 60 miles. And I’m pretty sure that
the tattered pilot’s seat came from the
VW bus of a group of Deadheads, short-
ly after the ’77 spring tour. To discover
where the magic happens, I have to peek
beneath the forlorn facade. Integrated
where the magic happens, I have to peek
beneath the forlorn facade. Integrated

Another prized advance is the Joint
Helmet Mounted Cuing System. “We just
call it The Helmet, with the emphasis on
the,” says Stratton. From his gear locker
in the ready room, Stratton offers me his
helmet to inspect. The visor is nearly
opaque, and the shell is embedded with
magnetic sensors that transmit real-time
spatial data from a pilot’s head position
to receivers inside the cockpit. During
a dogfight, Stratton can cue and fire
weapons at attacking aircraft, even dur-
ing high-G maneuvers, simply by glanc-
ing at his enemy. “I really don’t know
how we did missions before we had the
Helmet,” he admits.
Leestma, who has racked up more than
100 F-15C hours, tells me about a recent
radar makeover called Active Electroni-
cally Scanned Array, or AESA. (As part
of an Air Force F-15 program known as
Golden Eagle, C-model airframes are un-
dergoing stress tests, and those with the
least wear and tear will receive an AESA
system.) Conventional radars make sweeps
that show solid objects as pings or blips
on a head-up display. With each radar
pass, the processor beats. The problem is
that in a dynamic air-to-air situation, bad
ings happen between cycles. “By the
time the radar we have now does all
its math, you might have something com-
pletely different out there,” says Leestma.
AESA is fluid and encompassing. It uses
multiple frequencies to continuously
scan the skies, then stitches together a
real-time radar image. Leestma explains,
“It paints the picture of anything mov-
ing out in front of you and constantly up-
dates it.”

THE ECONOMY IS QUASHING
spendy military ventures, and fifth generation
fighters are already suffering the wrath
of the red pen. With every F-22 costing
as much as $227 million, according to
the Rand Project Air Force analytical team,
President Obama ordered production

During a 2009 training exercise over
Montana, F-15Cs release flares and execute
evasive maneuvers.
halted at 187 jets and slashed further fund-
ing. The ongoing F-35 development pro-
gram, a relative bargain at $155 million
per airplane, is already over budget and
behind schedule, causing Congression-
al colic. Cutbacks to its $300 billion-plus
program are virtually certain. That’s just
line with F-15 pilots, who believe their
dogfighting capability is capable of de-
fending America’s turf for the foresee-
able future. “The F-15C is still our front-
line air superiority fighter,” says Major
John Boehner, a veteran F-15 pilot and
program element monitor at Langley,
whose job entails setting future hardware
and software requirements for the Eagle
fleet. “It was overbuilt in a good way, de-
signed with enough extra margins to al-
low us to have all the options we have
today for upgrading. Some call it the
world’s greatest fighter based on its proven
record. It has a kill ratio of 104-0.”

In a dogfight where an F-15 might face
down against a Russian Sukhoi Su-27 or
China’s Shenyang J-11, both fourth
generation fighters, or even the mighty
fifth generation F-22, Eagle pilots are con-
fident they’d triumph. In fact, two pilots
told me that if an F-22 uses its thrust vec-
tor to do a post-stall maneuver dur-
ing a dogfight, there is a specific move
that they can execute to win. This clas-
sified tactic is the F-15 pilot’s ace in the
hole. Stratton acknowledges the tactic,
but cautions that in air-to-air combat, no
one move will always solve a particular
problem. “Rather, it is much more like-
ly that the F-15 pilot was able to fly his
aircraft to its maximum potential [while]
the F-22 pilot made a maneuver error.
While the machine is important, and the
F-22 enjoys a maneuvering envelope ad-
vantage over almost every aircraft, the
man in the cockpit tilts the balance be-
tween success and failure. A pilot that is
tuned to its maximum potential has the
upper hand.”
ing even with a lot of battle damage. The Eagle also blends a computerized system with old-fashioned manual controls. Other fighters, particularly the F-22, are pure fly-by-wire. In the F-15C, its pilots, a pilot can override his computer warnings and go beyond the edge to get that little bit of boost to survive. In the F-22, the computer system simply won’t allow that, as it thinks the airplane will break up in flight—not good when you’re in the midst of a dogfight and need to execute tactical maneuvers.

Major David Skalicky, leader of the F-22 Aerial Demonstration Team, and a former F-15C pilot, disputes the F-15C pilots’ claim of an advantage. “The F-22 will aerodynamically out-perform and out-power the F-15 in every scenario,” says Skalicky. “That isn’t to say that on exceptionally rare occasions, F-22 pilots haven’t lost to F-15 pilots in practice dogfights due to poor maneuver selection. However, the credit for victory in that scenario belongs to the F-15 pilot, not the airframe.”

THE MAJORITY OF active-duty Eagle pilots flying today were born after the aircraft went into service. So to find out if anyone expected the F-15 to remain a viable dogfighter for more than a quarter-century, I tracked down those who designed and built it. They gather every century, I tracked down those who

Byrnes agrees with most Eagle pilots that the F-15’s longevity is a direct result of its singular mission. “We designed the F-15 to do what we wanted it to do, and nothing else.” Byrnes is a critic of the multi-role concept: “You don’t want to make an airplane be the Swiss Army knife of a fighter,” he says. “I’m absolutely not in love with the idea. The F-15 is the worst nightmare of hardware idio...