

An aerial photograph of a densely populated city, likely in the Middle East, with a brown and tan color palette. The city is viewed from a high angle, showing a grid of buildings and roads. In the foreground, a fighter jet is flying towards the left. In the upper right corner, the tail and wings of another fighter jet are visible, flying towards the right. The sky is clear and blue.

EAGER LION

By **Marc V. Schanz**, Senior Editor

As unrest ripples across the Middle East, Jordan strengthens its ties with the US.

At the “go” signal, the pilot and ground crew of an F-16 sprinted toward their aircraft on the ramp of a desert air base. Word came down from the Air Defense Operations Center that unidentified aircraft had appeared on radar, heading for a large populated area. Maintainers ran down preflight checks, as the pilot got the engine turning. Minutes later, checks complete, the jet taxied to the flight line, and the pilot punched the throttle and streaked off to intercept the intruder.

The drill was a basic run-through of an air defense scramble—a mission many members of the Colorado Air National Guard’s 120th Fighter Squadron watching the launch had flown countless times back at Buckley AFB, Colo.

But this particular day in June, the “Mile High Militia” was drilling far from Colorado, on the home turf of one of their closest partners. The F-16 that had just scrambled belonged to No. 6 Squadron of the Royal Jordanian Air Force, flying from Muwaffaq Salti Air Base in Azraq, Jordan, a desert hamlet some 60 miles east of the capital, Amman. The sortie was one of many simulated air defense scrambles that would take place in the coming days, as Colorado ANG and Jordanian pilots spent nearly two weeks this past June flying daily aerial exercises.

A Royal Jordanian Air Force F-16 leads another Jordanian F-16, a USAF F-16, and two US Marine Corps F/A-18s on a sortie during Eager Lion.

ANG photo by SMSgt. John P. Rohrer



ANG photos by SMSgt. John P. Rohrer

SrA. Kristen Lee and TSgt. Joshua Matthews (beneath wing) from the Colorado Air National Guard ready an F-16 for takeoff as part of a scramble competition during Eager Lion.

The pilots and crews at Azraq were not alone. US, Jordanian, and allied forces undertook a vast and complex series of air, ground, and sea exercises across Jordan during Exercise Eager Lion 2013, geared specifically to reinforce joint operations.

Making the Grade

The exercises at Salti Air Base marked the seventh iteration of an annual aerial event known as Falcon Air Meet. The FAM effort, conceived with the help of Jordan's Prince Feisal Bin Al Hussein, a lieutenant general and former Chief of Staff of the RJAF, is meant to improve cooperation and interoperability between the US, Jordan, and regional allies. Tasks range from air combat, maintenance, and munitions handling to close air support. Several friendly "graded" competitions are part of the event as well, such as the air defense scramble, weapons loading, and a bombing competition. This year, however, FAM was folded under the umbrella of Eager Lion—a more sprawling and complex exercise.

A keystone exercise of military cooperation in the region, the 2013 iteration of Eager Lion played out as regional tensions ratcheted up. At the time, the civil war in

Syria was going from bad to worse, following the arrival of Hezbollah fighters.

A Patriot air defense battery deployed to Jordan at the request of the Jordanian government just prior to the start of the exercise. After the first week of the exercise, the Department of Defense announced in a statement the Patriot battery and F-16s

deployed for exercise support would remain in the country after the conclusion of Eager Lion, to reassure allies and partners and show the US commitment to regional stability.

USAF and RJAF have longstanding ties that have grown closer in recent years. Their pilots have trained together in the





US, in Jordan, and in exercises and operations around the world. RJAF pilots and crews flew missions in NATO's Operation Unified Protector over Libya.

This year, F-16s from the 120th FS deployed to fly alongside their counterparts in the RJAF's No. 1 and No. 6 Squadrons over the Jordanian desert. In addition to

the F-16s, the air meet featured F/A-18 Super Hornets from Marine Fighter Attack Squadron VMFA-115 and a deployment of ANG F-16s from the Ohio Guard's 112th Expeditionary Fighter Squadron. Aircraft from both the 120th FS and the 112th EFS remained in Jordan after the completion of Eager Lion activities, at the request of the Jordanians, to continue training activities.

Since 2006, the US has flown alongside the RJAF in each Falcon Air Meet. Allies such as Belgium, Pakistan, Turkey, and the United Arab Emirates also participated.

The Colorado Air Guard, the State Partnership Program affiliate of the RJAF since 2004, has been instrumental in setting up, coordinating, and officiating the series, RJAF officials noted. "It has benefited both sides, as this relationship has built up," Prince Feisal said in a brief June interview at the start of the exercise. "Many [Colorado Air Guardsmen] are here for the fourth or fifth time—it has been a fantastic partnership," he said. "It is not just a rotation; we have built up relationships over time as friends and colleagues."

Still, for the Colorado Air Guard, this year's deployment was a new experience—its first opportunity to fly in the FAM competition rather than serve solely

US marines prepare to load bombs on an F/A-18 in Jordan. Other marines worked with joint terminal attack controllers to perform close air support during Eager Lion.

as judges and organizers. For pilots familiar with air defense drills, the setting allowed some opportunities not normally afforded back home.

"It's a great opportunity. They have great airspace, with few restrictions," said Capt. Carson Brusch, with the 120th FS and one of the competitors in the air defense scramble. Pilots could take off and leave their jet in afterburner to simulate a real-life intercept, a rarity for home station sorties. In Jordan, a pilot can climb as high as he wants and go as fast as he wants, within the specified airspace, he noted.

"The intent is the simulation of a standard alert for homeland defense, just like we do in Colorado, [the Jordanians] want to [practice] it here," said Maj. Chris Southard, the chief of safety for the Colorado ANG's 140th Wing.

Southard served as the chief judge for the "white force"—the organizers for the competitive events of the FAM. But the competition made up only a small portion of the estimated 88 sorties the 120th FS pilots flew. Lt. Col. Patrick Hanlon, the 120th's commander, noted the bulk of the exercise was spent flying continuation training, a daily battery of



TSGt. Sarah McCaan (l) and other troops install a defensive perimeter fence during Eager Lion.



ANG photo by SMSgt. John P. Rohrer

sorties and scenarios that build tactics and capabilities of both US and RJAF pilots.

“The first week out here is primarily air-to-air and counterair missions with the Jordanians,” Hanlon said, while the second half of the exercise refined close air support tactics, with progressively more difficult mission profiles.

The events are fun, “but the real gem is the CT, the continuation training. ... That’s the true interaction with the Jordanians,” Southard said.

This year’s installment was much greater in scale than before due to FAM’s alignment with Eager Lion. Many sorties flew in support of Eager Lion activities, and USAF and RJAF aircraft flying from Azraq were key to the success of what has become US Central Command’s largest in-theater multilateral military exercise. Begun as a bilateral “proof of concept” exercise between the US and Jordan in 2011, it has grown quickly in just three iterations. According to US and Jordanian officials, this year involved some 8,000 personnel, of which approximately 3,000 belonged to the Jordanian armed forces.

In addition to tactical air exercises staged from Azraq, US and Jordanian forces spread across the country for Eager Lion drills, participating in specific scenarios from tabletop exercises aimed at the execution of humanitarian relief contingencies and crisis management to insertion of airborne forces and combined field exercises with air support.

The Navy and Marine Corps, operating in the Red Sea off the coast of Jordan’s sole port of Aqaba, exercised amphibious landings, rescue operations, and insertion operations with MV-22 Ospreys, A/V-8B

Harriers, Sea Cobra attack helicopters, and other assets. Lt. Col. Michael Kerkhove, the executive officer of Marine Aircraft Group 50, said the meet is “a great chance to do interservice dissimilar training.” Many younger marine pilots, in particular, don’t get a chance to fly against F-16s back home.

Major Non-NATO Ally

The exposure to the RJAF’s operations, tactics, and capabilities adds value, Kerkhove said, as his squadron works often with air forces in the region as part of theater security cooperation efforts. “Getting to train [with the Jordanians] is a great opportunity. ... You never know who you’re going to run into again in the future,” he added.

It is easy to see why security cooperation efforts with the Jordanians have expanded. Jordan’s military capability is one of the more mature of US allies in CENTCOM’s region—and officials on both sides have sought to deepen cooperation. Also, the US commitment in the Middle East has already shifted considerably from one built primarily to support manpower-intensive wars in Iraq and Afghanistan, giving more flexibility for CENTCOM to engage partners.

Training exchanges of pilots, soldiers, and other Jordanian officials have expanded in the past few years. Since 2009, by Defense Security Cooperation Agency estimates, Jordan has received excess US defense equipment to the tune of some \$81 million—from small arms to vehicles to aircraft improvements.

One of two Arab nations with a formal peace treaty with Israel, Jordan was dubbed

Jordanian F-16s take off during a scramble competition between Colorado ANG units and the RJAF units. Jordan has a fleet with some 70 F-16s.

a major non-NATO ally (MNNA) in 1996. This designation has allowed Jordan to receive a wider range of military support from the US—from increased training rotations to loan guarantees to finance modernization efforts.

The 120th FS has a unique perspective as the RJAF’s state partner since 2004. The two organizations have participated extensively in exchanges, upgrade training, and exercises.

“This partnership has progressed well,” and this was a great opportunity to deploy to Jordan, to operate in a different environment, said USAF Maj. Gen. H. Michael Edwards, the adjutant general of the Colorado National Guard, who visited Jordan during the exercises. The Colorado ANG even sent three of its own to serve as liaison officers in the RJAF’s Aviano AB, Italy, operations center for NATO’s Unified Protector mission over Libya.

The partnership is closely aligned with Jordan’s improved air capabilities. The RJAF currently operates a modest-size fleet of approximately 70 F-16s, both older A/B models and newer variants obtained through surplus sales from European nations. Foreign military financing obtained via US aid has allowed the country to upgrade these aircraft steadily over the last decade, with features such as electronic countermeasure pods, AIM-120 Advanced Medium-Range Air-to-Air Missiles, and

SrA. Cinde Yoho aligns the suspension lugs on a Mk 82 bomb used in a bombing demonstration during Eager Lion.

the capability to carry precision guided munitions.

Jordanian officials note one of the goals of Eager Lion is to aid in the expansion of joint terminal attack controller capabilities in their military, as the country has a small cadre of certified JTACs.

Earlier this year, Colorado Air Guardsmen deployed to Jordan to certify some 10 RJAF pilots in night vision goggle operations in the F-16, said Maj. Jeremiah Tucker, an instructor pilot with the 120th FS. Members of the Colorado ANG and other Guard units trained four Jordanian instructor pilots, four flight leads, and two wingmen in NVG operations.

Those four instructors now have the certification to upgrade their own pilots



ANG photos by SMSgt. John P. Rohrer

Mk 82 bombs explode during the bombing demonstration at a range near Salti AB, Jordan. Below: A C-5M Super Galaxy lands at the northern Jordanian air base during a mission for Eager Lion.

based on what they want to fly, Tucker said. In April, he said, another Colorado ANG pilot visited Jordan to help teach tactics and use of the ALQ-131 electronic countermeasure pod, which has added capability for the country's F-16s.

It is not difficult to see why these exchanges have grown and flourished recently. Nearly landlocked, without large reserves of oil or natural gas, and with an economy largely dependent on services and tourism, Jordan needs peace and stability





ANG photo by SMSgt. John P. Rohrer

Jordanian and USAF F-16s and USMC F/A-18s fly over Jordan's capital city, Amman, during an Eager Lion sortie. Many of the Eager Lion sorties were staged from Salti, 60 miles east of Amman.

to prosper. Its military ties with the US and regional allies, such as the Arab gulf states, are key to keeping the kingdom's territory secure from myriad threats—particularly the raging civil war in Syria, whose border city of Daraa lies just 50 miles north of Jordan's capital.

President Obama paid a high-profile visit in March, praising Jordan as an “invaluable ally” in a joint appearance with King Abdullah II. In late April, Secretary of Defense Chuck Hagel visited, meeting with both Prince Feisal and Gen. Mashal Al-Zaben, Chairman of the Joint Chiefs of Staff of the Jordanian armed forces. The leaders discussed a decision to sustain a small contingent of US military personnel in Jordan to build on planning, improve joint readiness, and prepare for a “range of scenarios,” according to a spokesman.

In April, Hagel confirmed the US had delivered more than \$70 million in aid to the Jordanian military for equipment and training to detect and mitigate any “chemical weapons transfers” along its border with Syria and aid the ability to secure chemical weapons.

The Jordanian and US effort to expand multilateral Middle East regional security cooperation is reflected in the rapid expansion of Eager Lion. Nineteen countries either participated or sent observers this year, including regional allies Bahrain, Egypt, Kuwait, Lebanon, Qatar, Saudi Arabia, Turkey, the United Arab Emirates, and Yemen. While only 500 non-Jordanian troops participated in drills, both Jordanian

and US officials noted that many observers of the exercise have indicated their countries are interested in future participation.

An Eye on Syria

The 2013 installment emphasized “unconventional warfare,” to include air and missile defense, disaster relief, special operations, counterterror response, and integration with nongovernment organizations, Army Maj. Gen. Awni Al-Adwan, chief of staff for operations of the Jordanian armed forces, said in June. For Jordanian participants, especially those who have seen the growth of Falcon Air Meet, Eager Lion has added a whole new dimension.

In other years, Jordan had its own training areas for F-16s and other fighters, said RJAF Maj. Ali Shabana, a flight commander in Jordan's No. 1 Squadron. “Now, [with Eager Lion this year] the whole country of Jordan is our training area. ... We have more ranges, bigger areas. It stretched our exercise and scenario more ... on the air and on the ground.”

RJAF pilots flew air-to-air exercises with Marine F/A-18s, then close air support with Air Guard F-16s. US and RJAF assets participated in a full scale combat search and rescue exercise with US tactical fighters alongside Jordanian AS 332 Super Puma and AH-1 Cobra attack helicopters at the close of Eager Lion. “It's more

challenging,” Shabana said. There are more spaces; there are more aircraft, but it stretches the pilots and gives them confidence, he said.

US and Jordanian officials repeatedly emphasized they were practicing the nuts and bolts of air-to-air engagement in the first week of sorties, particularly “defensive counterair”—or DCA to pilots. Jordan's air defenses are of paramount concern to the country's leadership, and as they have improved, RJAF and USAF pilots wanted to push their tactics and skills.

While Washington strenuously delinked Eager Lion activities from events in neighboring Syria, the scenarios flown by many pilots reflected the very real worries of Jordanian and US officials. Air Guard, Marine Corps, and RJAF pilots repeatedly flew tactical intercepts against a range of targets during the air combat portion of the exercise against representative threats. For example, pilots simulated responding to MiG-29 incursions—the Fulcrum being one of the more capable airframes currently operated by the Syrian Air Force.

Given the short distances between population centers such as Amman and the Syrian border, a prime focus was defense of Jordanian airspace. Practicing counterair fundamentals was key to the

first week, Hanlon said of the exercises. “We want to drill on procedures for intercepts, defending air space, timing, and how to work with recognizing threats.”

The Jordanians are also practicing responses to “defector profiles”—the ability to determine if an aircraft is entering your airspace with the intent to defect, not attack. It’s a particularly difficult part of air combat, Southard noted. “[It’s] what we call ‘combat ID,’ ... figuring out who is good and who is bad,” and quickly. The inclusion of defector scenarios in the exercise is a reflection of real-world concerns. “We change the scenarios according to the situations around the world, and this year we have a defector scenario” to practice, based on what was learned in recent conflicts, Shabana said. He noted RJAF pilots flew sorties in Libya during OUP, a conflict that saw several aerial defectors. These

remain a concern for Jordanian officials in light of developments in Syria.

“There are signals you need to know, how to decelerate, look for lowered landing gears, ... hand signals to let pilots know where to go and what to do,” Shabana said. Getting a defector safely on the ground lies in practicing a range of nonverbal communications and being able to recognize and respond accordingly, he added.

“We don’t know what their intent is, and until we do we have to be careful and treat that aircraft as hostile until proven otherwise,” Southard said of defector profiles.

For both Jordanian and US pilots, the lessons from Libya are still fresh. Flying out of Aviano from March to October 2011, six RJAF F-16s escorted humanitarian aid flights and carried out combat air patrols during NATO operations. This

marked the first time the country’s tactical fighters had deployed in a multinational air campaign. “It was an eye opener for us,” said Shabana, who flew Unified Protector sorties. “It was surprisingly easy for us in many ways. We had been to a lot of exercises. ... Our lieutenants said, ‘Hey, we have done that before.’ ... They had more confidence.”

USAF Lt. Col. William E. Orton, the 140th Operations Support Squadron commander, was one of the Colorado Guard’s liaison officers during OUP and said the experience was a key part of the growing bond between the Colorado Air Guard and the RJAF. “We got to know how we worked, how we each flew,” he said. “We have relationships built over time. ... There is a good deal of trust between us.”

There is a great value in training events like Falcon Air Meet and Eager Lion, Orton said, as Operation Unified Protector



Col. Floyd Dunstan (center) greets Lt. Col. Patrick Hanlon as Hanlon arrives at Salti, in northern Jordan, to take part in Eager Lion.

ANG photo by SMSgt. John P. Rohner

demonstrated. The Jordanians supported operations with NATO, the United Arab Emirates, Qatar, and others. They learned a lot in the operation, such as air refueling in combat, Orton stated.

“If you are working alone, you know you’re the bad guy,” Shabana said with a laugh. “Events like these help all of us work together, it makes our crews, our pilots, more prepared to fly. Not just here, but around the world.”

Jordanian officials expect that other countries will participate in the future. Several sent representatives to both



Capt. James Edwards readies for takeoff prior to a scramble. US and Jordanian aircrews flew many air defense drills during the nearly two-week exercise.

Azraq and other locations in Jordan to observe activities. Shabana noted Jordan was hosting observers from the Moroccan military for the first time. Their air force has recently acquired F-16s, and they expressed interest in participating in future air meets and Eager Lion.

“When you look at the world and the changes that are happening, we are finding we are serving side by side more often,” Prince Feisal commented. “We will be better prepared as partners. ... It is important we learn how to work together at this phase, instead of when the bullets start flying.” ■