

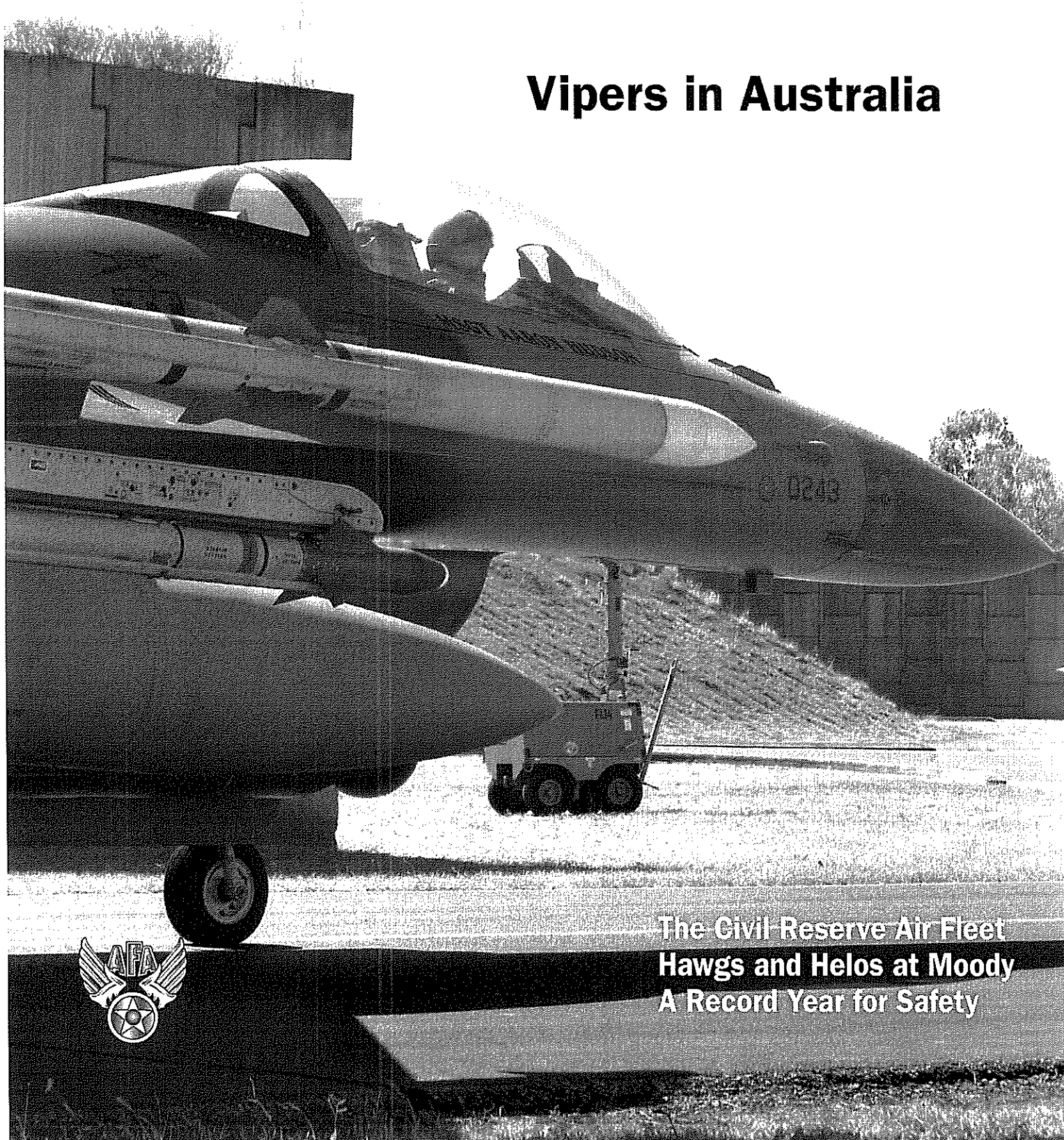
EXHIBIT 1

Journal of the Air Force Association

AIR FORCE

MAGAZINE

Vipers in Australia



**The Civil Reserve Air Fleet
Hawks and Helos at Moody
A Record Year for Safety**

TO THE FUTURE

By John A. Tirpak, Editorial Director

The commercial-military airlift complex is up for dramatic change.

An Atlas Air 747 is offloaded at Bagram AB, Afghanistan, in the summer of 2012. The Air Force depended on commercial carriers to provide as much as half the airlift needed to sustain the flow of people and cargo to and from the US Central Command area of responsibility over the past 13 years.

AT major US air bases in Southwest Asia and at waypoints around the world, Boeing 747s and other commercial jets share the ramp with Air Force C-5s, C-17s, and C-130s. These commercial carriers have at times borne as much as 50 percent of the cargo and passengers moving between the US and its forward wartime locations. Called the Department of Defense's Civil Reserve Air Fleet (CRAF), they have claimed as much as \$3.5 billion in annual contracts from US Transportation Command. But as the furious pace of operations subsided, and a firm date for the withdrawal of combat forces from Afghanistan drew near, TRANSCOM and Air Mobility Command recognized that their relationship with the private air carriers had to change.

Military airlift needs "have been [in] a gradual decline," said Merle Lyman, AMC's Commercial Airlift Division chief, in an interview. Because US forces have been pulling back from war zones in Asia and the Middle East—first from Iraq and now from Afghanistan—"airlift requirements naturally followed that trend," he explained. The forecast requirements beyond the planned 2014 Afghanistan withdrawal date "reflect that it's falling off a cliff" and "beyond that time are lower than what we've seen in decades."

Gen. Paul J. Selva summarized the situation at his March 2014 confirmation hearing to be head of TRANSCOM. He explained that the National Airlift Policy, governing CRAF, was last updated in 1987, and the airline and air cargo industry has evolved considerably since then.

"We have ... 28 separate carriers that provide passenger and cargo services," Selva said in his testimony, "each with their own business plan and ... motivation for how they run their businesses." He said a study was underway "to get at the 'eashes' of how the industry runs and get at the broad macroeconomics of how the industry is going to evolve over time."

Not only were US airlift requirements winding down—and US military strategy changing—but the number of commercial carriers was also shrinking, largely due to mergers and changing market conditions.

AMC and TRANSCOM were working with the industry executives, he reported, "to come to some agreement on what a contract mechanism might look like to incentivize their volunteer service" in the CRAF. The study would be the first look

at this fundamental enabler of national military strategy since Operation Desert Storm in 1991.

That study has since been concluded, and a CRAF restructuring is now in hand. Government and industry partners seem satisfied CRAF can endure for the foreseeable future, even if the forecast airlift demand changes unexpectedly.

The Defense Department and its partners in the Civil Reserve Air Fleet have worked together formally for airlift since 1951. The CRAF came into being because the US realized it might have to suddenly move massive amounts of ground and air forces overseas, far outstripping the speed and capacity of its military transportation resources.

A three-stage mobilization plan emerged for the government to "draft" commercial aircraft in times of national emergency. The CRAF was refined over the years: To get the airlines and cargo companies to volunteer to be mobilized—and to outfit their aircraft with hard decks and other improvements needed to make them militarily useful—the government offered incentives.

AIRCRAFT RESERVISTS

In exchange for participation in the CRAF, commercial carriers enjoyed first dibs on peacetime government air transport and air travel contracts. Today, only carriers participating in CRAF can compete for government air travel business. (Those carriers technically ineligible for CRAF because their aircraft are not militarily suitable may still compete for government travel contracts. Such aircraft tend to be smaller, regional types.)

Not unlike human reservists, if "activated," CRAF aircraft must be ready to go within 48 hours and serve as long as a crisis persists—that is, until the Secretary of Defense orders an activation concluded. The number of aircraft called up is proportional to the size of the contingency: Stage 1 is for a regional crisis, a Stage 2 activation signals a major theater war, and Stage 3 represents a national mobilization for world war. At the beginning of 2014, CRAF comprised more than two dozen carriers and 552 commercial aircraft.

The CRAF has only been officially activated twice. A Stage 2 activation took place for Operation Desert Shield and Desert Storm in 1990-92, and a Stage 1 activation was ordered for Operation Iraqi Freedom in 2003. However, since 2001, private carriers have seen a big upward trend in government contracts,



Staff photo by John A. Tirpak

at levels approaching that of Stage 3, even though it was never declared. To the degree possible, contract aircraft fly to airfields considered relatively safe, but activated CRAF aircraft may be sent anywhere.

Because the US military depends so heavily on CRAF, and because so many carriers depend on US government business, the Congressional Research Service dubbed the relationship “symbiotic” in a 2006 study of the program. In exchange for getting to buy only as much additional airlift as it needs, the government gives preference and steady work to those who commit to the program.

The government doesn’t want to be the sole source of revenue for any company, however, and sets limits on how much of a carrier’s overall business can be government contract work. That’s because TRANSCOM and AMC want those carriers to be viable during downtimes, so they’ll be available and can be called on for the next contingency.

At the height of the Iraq and Afghanistan conflicts, the industry was changing, Lyman said.

“If you look back eight, 10 years ago, we had basically seven major carriers. Now, through mergers, we’re down to basically three passenger and two cargo, once the US Airways and American merger is complete,” he said. For major domestic scheduled passenger carriers, that leaves United Airlines, American Airlines, and Delta Air Lines, and for cargo, FedEx and United Parcel Service. The others that

USAF photo by Maj. James Hutton



This Boeing 767, reconfigured to serve the aeromedical evacuation mission, was used for extensive training at Scott AFB, Ill.

Selva mentioned are a mix of US-flagged charter companies.

The passenger airlines get the bulk of General Services Administration’s City Pairs business—essentially all government official flying travel booked through airlines. At the same time, some of the business for certain companies—notably commercial passenger charters—has dried up.

LESS EXCESS

“The commercial charter passenger market is 10 percent of what it was in the ‘90s,” Lyman said. He explained that travel agents used to “sell vacation packages, and they would charter an airplane” and fill it up with bookings for

destinations like Cancun or Rome. Now, “the major carriers have ... moved into those markets with scheduled service,” eliminating much of the charter passenger business. Lyman said three of six remaining passenger charter companies exited the market just in the last three years. Consequently, the remainder become more dependent on CRAF work, a situation that has been allowed to continue in light of military need.

The major carriers have also changed their business models, Lyman said.

“I wouldn’t say they have fewer airplanes. They have fewer spare aircraft. They have right-sized their fleets to match the business levels they can support,” he said. That means “there is less excess capacity out there” that the US government can tap.

The airplanes also tend to be, on average, larger, and thanks to a push by AMC and TRANSCOM, they are more fuel efficient, thus expanding the amount of available cargo throughput and reducing fuel demand. Not coincidentally, this has made the carriers more efficient and productive.

At his confirmation hearing, Selva said there was yet another facet of the commercial business affecting the supply and demand for commercial air transport.

“With the introduction of large aircraft with large cargo bays below the passenger decks, we now see commercial passenger carriers re-entering the charter cargo market,” Selva stated. “That has changed the dynamic of our Civil

Army Col. Kirby Watson (r) speaks with Gen. Paul Selva (l), head of TRANSCOM, at MacDill AFB, Fla. Selva announced the restructuring of CRAF during his confirmation hearing in March.

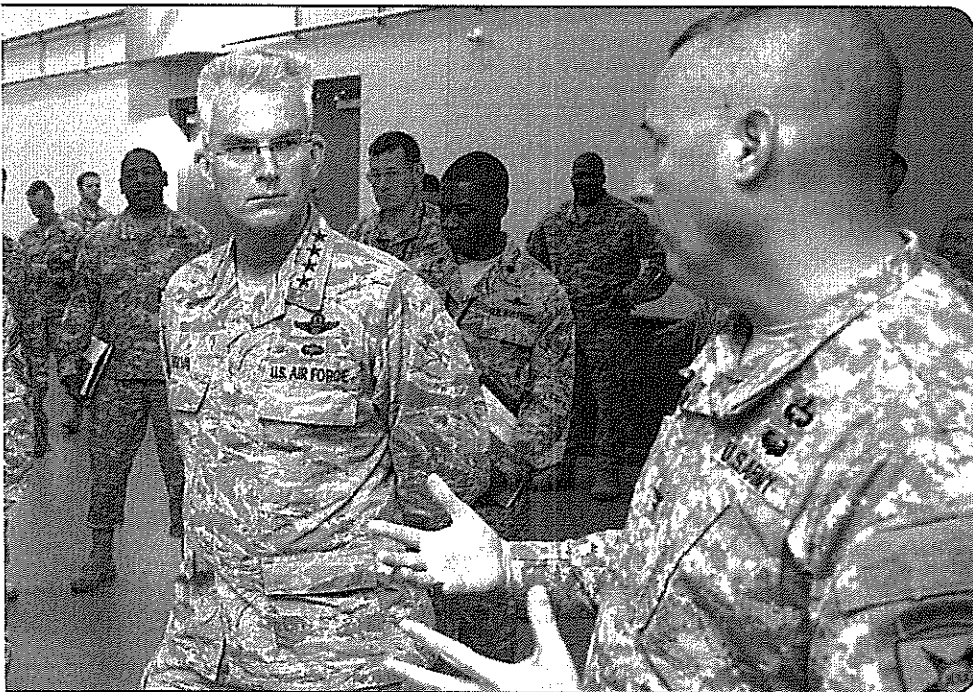


Photo by Rick Maupin

Reserve Air Fleet partners. We have to understand the impact of that change in the economy on their capacity to be with us in crisis.”

The character of AMC’s organic fleet has also changed. Compared to 1990, when CRAF activation was at its pre-9/11 zenith, AMC’s aircraft are more numerous, more reliable, and larger, because of the introduction of the capacious C-17 and the re-engined and upgraded C-5M. In fact, the C-17 fleet is larger than the Air Force asked Congress to provide. With the wind down in Afghanistan, more of the organic fleet is available for cargo and passenger work.

National strategy has shifted, as well.

“The old strategy was to support two major theater wars,” Lyman explained. “The new strategy is to ‘defeat and deny,’ they call it, so it’s full engagement in one war while we deny forward movement in another theater.” Because of the change, “there is potential for the number of aircraft required in the CRAF program to go down, but ... we don’t know the answer to that, yet.”

The CRAF study wound up being an 18-month affair—an attempt to get ahead

of the shifting market and requirements and establish a CRAF operating model that would be “good” for the foreseeable future and adaptable to any strategic changes dictated by an upcoming mobility requirements study.

“We dissected key parts of the CRAF program, looked at it in intricate detail, and then proposed recommendations for the TRANSCOM commander and AMC commander approval that would restructure the program with a focus on maintaining readiness,” Lyman said. The goal was to have the commercial element “ready to respond to the next contingency, which includes humanitarian assistance, if needed. And so we’ve done that.”

The results of the study generated a package of 22 proposed recommendations to change the structure and timing of the CRAF. These were meant to keep the program attractive to industry and ensure the commercial partners would still be available when the nation called. At the same time, the recommendations had to adjust to reduced budgets and transport demands. The package was approved in mid-2014 by Selva, then head of AMC and now TRANSCOM chief, and Gen.

William M. Fraser III, now retired, the TRANSCOM commander at the time.

Congress does not need to approve the changes. “I don’t believe any legislative changes are required to the National Airlift Policy,” Selva said in testimony.

“It’s all within the authority of the TRANSCOM commander,” Lyman said, “however, we briefed congressional staffers and we have briefed Headquarters, Air Force. So everyone in our chain of command is well-aware of the results of the CRAF study.” The carriers were kept involved with the refinement of the CRAF program and their input was solicited. Now that the changes are final, “the carriers have not fired back with a lot of resistance,” Lyman said, although whether they are “satisfied” with the changes “is in the eye of the beholder.”

Most of the 22 changes in the CRAF agreement are highly technical and have to do with how many aircraft carriers must volunteer for CRAF duty; changes in the reliability standards, utilization rates (affecting how the carriers get paid), and response time; elimination of the aeromedical evacuation segment; establishing modern metrics for the pre-

An An-124 on the flight line at MCAS Miramar, Calif., in 2012.

USMC photo by Cpl. Jamean Berry



With a Little Help From Our (Former?) Friends

US Transportation Command needed to hire the services of Russian-flown Antonov An-124 airlifters, similar in size to the C-5 Galaxy, to help deploy outsize equipment to Iraq and Afghanistan over the last 13 years. This was especially so during the aggressive program to rapidly deploy mine-resistant, ambush-protected (MRAP) vehicles—so heavy only one or two could be carried at a time by even the largest transports.

Hiring these aircraft was not done through the Civil Reserve Air Fleet, but the companies involved did have to partner with CRAF participants, according to Sandra Halama, TRANSCOM’s Contract Airlift Division chief.

“We charter them just as we do US-flagged carriers,” Halama said in an interview. “We charter the plane,” rather than lease it. “But it’s a subcontracted arrangement through a CRAF carrier. So all awards to those foreign companies are made through the CRAF contract and their CRAF sponsor.”

The CRAF sponsor—a US-flagged carrier—acts on behalf of companies like Volga-Dnepr that provide the big Antonovs or Ilyushin Il-76s. The US carriers receive “some kind of benefit” from acting as middlemen. However, those charters don’t count toward the US-flagged carrier’s entitlement to GSA City Pairs contracts or other cargo awards, Halama said.

Russian aircraft are chartered “only when we absolutely need to go to them,” she said, because of the Fly America Act. “We always go to our CRAF carriers first.” Russian aircraft are hired for outsize requirements too large to fit in a US-flagged carrier’s aircraft, when C-17s are not available, or when “it’s going to a location that we would not normally send a US-flagged carrier. So it’s kind of a path of last resort.”

The use of Russian-flagged aircraft has gone down “dramatically” over the last 18 months to two years, said Merle Lyman, chief of AMC’s Commercial Airlift Division.

dictability and flow of cargo; and creating new ways for carriers to comment and communicate with TRANSCOM.

The new structure also eliminates the “60/40 rule.” It demanded that 60 percent of a carrier’s business be other than DOD work. It was viewed as paternalistic, and according to the study, “carriers expressed ... a view that carriers should be responsible for ... making their own business decisions.”

More aircraft were added to Stage 1, to increase the TRANSCOM commander’s flexibility to use it as a “surge capability for short-term requirements.” It will be able to deliver two brigades of people and equipment within seven days, or support a major humanitarian assistance/disaster relief operation. Stage 2 and 3 remained as they were, “sized to satisfy mobility study requirements.”

Rules changed, too, about how much credit would be given for GSA contracts based on CRAF participation. Under the old system, preference was based on participation in all three CRAF stages. Now, “the entitlement will be based on the aircraft placed into Stage 1,” Lyman said.

However, all participants will simply be asked to contribute one airplane to Stage 1. Organic lift is sufficient to handle the bulk of the requirement, and there is more capacity available before the commercial carriers need to be called on. There will also be at least seven days’ notice of activation, and seven days’ notice of deactivation, to help the carriers better plan the use of their assets.

Some metrics were also adjusted. CRAF participants had been graded on their on-time performance over a three-



Marines board an aircraft owned by Federal Express and chartered by Military Airlift Command during Operation Desert Storm.

month period. However, according to the study, “future business levels will be insufficient for a carrier to accumulate enough missions” in a 90-day period to meet reliability performance standards, so the metric has changed to four months or 15 cargo or 20 passenger missions.

AIRLIFT DEMANDS LINGER

The structural changes were meant to provide surge capacity on short notice, provide meaningful incentives, make CRAF scalable to future requirements, allow it to weather the “ebbs and flows” of the commercial market, improve internal management of CRAF, and pursue efficiencies “in planning, scheduling, and execution.”

Although the CRAF changes go into effect with the signing of Fiscal Year 2016 contracts—in negotiation this past

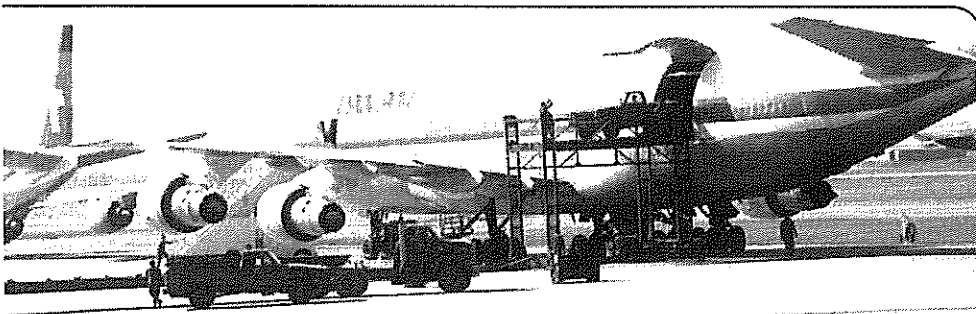
fall—some of the conditions have, perhaps predictably, changed.

Sandra Halama, chief of the TRANSCOM’s Contract Airlift Division, said the airlift demand for supporting operations in Southwest Asia didn’t decline quite as fast as expected. Some of that was due to the retrograde, or the return of people and equipment to the US, as Afghanistan operations wound down. (However, the bulk of retrograde shipments went by sea, or by air to seaports for surface travel the remainder of the distance.)

Now, “it’s a combination of factors of current events and unexpected occurrences that we need commercial airlift to support,” Halama said. She did not specifically say so, but a sudden surge of requirements to support operations against ISIS terrorists in Syria and Iraq required substantial movements of aircraft support gear and personnel from the US to Mideast bases.

“It’s not anything that could have been forecasted,” she said. The demands on airlift this past fall were “ad hoc, ... so they would not be in that forecast that was originally provided.”

Lyman said the point of the restructuring, overall, was “we are focused on maintaining readiness. And it’s not just maintaining the readiness of the CRAF and the organic fleet. It’s readiness of the enterprise to answer the next call.” He said, “We are postured very well to support the interests of this nation with a ready air mobility fleet, which includes our CRAF partners.”



Military vehicles are unloaded from a Pan Am airliner, a CRAF aircraft in 1986. The jet was transporting the vehicles for a bilateral exercise, Team Spirit, with South Korea.