Privatized Adversary Air Combat Training

With U.S. military services looking to alleviate shortages of pilots and publicly admitting shortages in readiness, the Navy, Marines, and Air Force have begun to contract out some kinds of pilot training—specifically the live simulation of enemy aircraft. This trend, coupled with the worldwide rise in available military jets as air forces modernize, has led to the emergence of a new private industry offering adversary air combat training.

What is adversary air combat training?
Before the Vietnam War, American air forces trained internally, with pilots flying against others in similar aircraft using the same tactics. During that war, however, the United States learned a great deal about modern adversary tactics and the capabilities of the (mainly Soviet) aircraft employed in that war, which often differed markedly from what had been experienced in prewar training. To spread those lessons and train pilots more realistically, the U.S. Air Force and Navy began formal programs of Dissimilar Air Combat Training, or DACT.

DACT pilots were trained in adversary tactics of the time, and flew U.S. aircraft that most resembled expected adversaries in performance, painted in foreign camouflage to provide a more realistic image. Under then-classified programs, the Air Force also acquired actual foreign aircraft to better determine their characteristics.

The Air Force established Aggressor squadrons that participated in large exercises and toured fighter bases to provide realistic opposition during training rotations. The Navy created adversary forces that flew as opposition to pilots going through the TOPGUN senior fighter school. Those programs continue to the present day.

How are private firms involved?
As global air forces modernized over the past two decades, the wide availability of surplus third- and fourth-generation fighter aircraft and high-performance jet trainers led to the establishment of private companies providing “adversary air” on a contract basis. Firms such as Draken International, TopACES, Discovery Air, Tactical Air Support, and ATAC initially provided services to foreign air forces whose smaller fleets did not permit establishing their own dedicated adversary forces.

The U.S. Navy and Air Force experimented with contract adversary air in the mid-2010s and have subsequently entered into major contracts. From the military perspective, these services offer U.S. pilots the opportunity to fly against a diversity of aircraft types without the overhead and expense required to maintain a fleet of planes not otherwise in inventory. Particularly in the case of the Air Force, which has increasingly publicized a shortage of pilots, using contractors to provide adversary air may free up experienced uniformed pilots for other duties.

Figure 2. A-4 Aircraft
Operated by Draken International

There is some precedent for privatization of military support tasks; the U.S. Navy has also experimented with contract aerial refueling services. Many foreign air forces, including Britain, have given up or significantly curtailed their own refueling operations in favor of contractors.

Although contractor fleets were initially equipped with (often upgraded) trainer jets and second- and third-generation fighters like the F-5 and Mirage F1, they are rapidly modernizing to include fourth-generation fighters such as F-16s and F-18s, acquired from foreign militaries’ surplus.
The inaugural contracts
The Air Force was first to contract for adversary air services. An initial contract with Draken International of Lakeland, FL, in September 2015 provided services to the Fighter Weapons School at Nellis AFB, Nevada, and was seen as a trial for such arrangements. A subsequent contract was awarded to Draken in June 2018.

In November 2018, the Navy granted Tactical Air Support of Reno, NV, a five-year contract, worth approximately $107 million, to support training at Naval Air Station Fallon, NV. These missions are primarily aimed at increasing the readiness of naval air units preparing to deploy to sea. That award was protested by another contractor but upheld by the Government Accountability Office.

In October 2019, the Air Force contract awarded indefinite delivery, indefinite quantity contracts to seven adversary air providers. This meant that those companies qualified to bid on up to 8,848 training sorties across six bases. The first awards under these contracts, on July 21, 2020, went to

- Airborne Tactical Advantage Company (ATAC), a unit of Textron Corporation. The $240 million contract is to support operations at Luke AFB, AZ, and Holloman AFB, NM;
- Tactical Air Support, for $90.4 million, to support training at Kingsley Field, OR;
- Draken International. Under their $74.5 million award, Draken is to provide services at Kelly Field, TX, and Seymour Johnson AFB, NC.

The remaining contract, for operations at Eglin AFB, FL, has yet to be awarded.

Figure 3. USAF Aggressor F-16

Potential issues
While relieving strain on uniformed units and freeing pilots for other tasks, contracting out adversary air operations may present other issues for consideration:

- The cost of contracting all such operations for the Air Force is estimated at $400 million a year.
- Operation of DACT units in the military has yielded a cadre of experienced pilots thoroughly versed in adversary operations, who can be significant assets to other units in times of conflict; contracting out such services could result in a loss of that knowledge, or potentially make it harder to employ in wartime.
- U.S. DACT units benefit from the latest intelligence on potential adversaries; it is not clear how much of this knowledge could be shared with contractors.
- Increasing the use of contracted adversary air operations could increase the competition for experienced pilots, which is one of the factors in the current Air Force pilot shortage.
- Some of the major potential contractors have significant foreign ownership and/or are headquartered in foreign countries. Most use foreign-made aircraft, although it might be argued that this is part of the point of dissimilar training.

A broader issue is whether military training should be considered an inherently governmental function, part of a long-standing debate on privatization that government has addressed previously but is also currently evident in areas such as air-to-air refueling services and logistics support for military aircraft.

In possible counterpoint to the contract adversary air movement, the report accompanying the Fiscal 2020 National Defense Authorization Act included language requiring the Air Force to report on the costs and schedule for expanding its in-house Aggressor fleet.

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