USAF Wing Force Structure

The newest addition to the Air Force Historical Research Agency's homepage, the USAF Wing Force Structure database measures the number and functions of wings and wing equivalents from 1939 through 1999. We use wings and wing equivalents because the number of operations wings is the traditional measure of USAF annual force strength. From the end of World War I through World War II, the combat group (predecessor of present day operations wing) was the measure of force strength for the Army Air Service; its successor from 1926, the Army Air Corps; and, in World War II, the Army Air Forces. Through the 1920s, the total offensive capability of the Air Service rested in one pursuit (fighter air-to-air), one bombardment, and one attack (fighter air-to-ground) group. At the beginning of World War II, plans called for 54 combat groups. At peak strength during the war, the Army Air Forces had almost 400 flying groups. These included liaison, composite, air commando, air transport, combat cargo, troop carrier, fighter, reconnaissance, bombardment, and pilot training groups. With the establishment in 1947 of the United States Air Force as a separate military service, the force structure began to move from combat groups to operations wings and by the Korean War, the Air Force was describing its force structure to Congress in terms of operations wings.

The primary value of the database rests in the trends shown by the overall figures. These trends include draw-downs after World War II, Vietnam, and the Cold War. From 395 groups in 1943, the Army Air Forces dropped to 66 in 1946, after World War II. From 171 wings in 1970, the Air Force dropped to 139 in 1977 in the post-Vietnam War draw-down. From 182 wings in 1990, the Air Force reduced to 115 following the end of the Cold War. Although numbers and percentages were less in draw-downs after Vietnam and the Cold War than after World War II, the effects were proportionate. In the later years, each aircraft had greater capabilities than did the World War II aircraft, manpower losses of more skilled personnel were systemic, and the Cold War draw-down saw greatly reduced infrastructure as numerous foreign and domestic bases were closed.

The most obvious build-ups occurred during the Cold War and the Reagan Era. The Air Force went from 90 wings in 1948 to a peak of 235 wings in 1956, and most of this increase was in strategic bombardment and fighter-interceptor wings. During the Reagan Administration, the Air Force grew from 158 wings in 1981 to 182 in 1990.

In addition to the overall trends, one may find functional changes as well. For example, Special Operations wings reached six at the height of the Vietnam War in the late 1960s, dropped to one in 1974, then gradually increased to five in 1999, the latter increase reflecting the establishment of the Air Force Special Operations Command. The growing significance of non-aircraft missions can be seen in the count of Space and Missile wings from the 1950s through the 1980s, reaching 10% of total wings in 1983. On the other hand, inactivation of strategic missile wings in the post-Cold War period reduced Space and Missile wings from 18 in 1985 to eight in 1999.

Dr. A. Timothy Warnock