

# 4677th DEFENSE SYSTEMS EVALUATION SQUADRON



## MISSION

### LINEAGE<sup>1</sup>

4677th Radar Electronic Evaluation ECM Flight  
4677th Radar Evaluation ECM Flight  
4677th Radar Evaluation Squadron, ECM  
4677th Defense Systems Evaluation Squadron

## STATIONS

Hill AFB, Utah, 18 Mar 1954-31 Aug 1972  
Malmstrom AFB, Montana, 31 Aug 1972-1 Jul 1974

## ASSIGNMENTS

## WEAPON SYSTEMS

B-57

## COMMANDERS

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<sup>1</sup> Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.  
Per AFHRA; unit does not have a lineage and honors statement, Jun 2013

## **HONORS**

### **Service Streamers**

### **Campaign Streamers**

### **Armed Forces Expeditionary Streamers**

### **Decorations**

## **EMBLEM**

## **MOTTO**

## **OPERATIONS**

Air Defense Command redesignated its 4677th Radar Evaluation Squadron as the 4677th Defense Systems Evaluation Squadron. 1 Jan 1960

Equipped with eight TB-29s, the 7th Radar Calibration Squadron of Headquarters Air Defense Force (CADF), Air Defense Command (ADC), arrived at Hill AFB on 1 December 1953. Its 35 officers and 126 airmen trained in and calibrated radar facilities in Ogden's area as part of the CADF effort. On 18 March 1954, the 4677th Radar Evaluation Flight assumed the mission and resources of the 7th.

The 4677 Defense System Evaluation Squadron was transferred to Malmstrom AFB, Montana. Assigned personnel at time of transfer were 71 officers, 254 airmen, and 7 civilians. The civilians were reassigned here at Hill AFB. AUG 31 1972

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4677th Defense 'Systems Evaluation Squadron: activated 1 Jan 60 at Hill AFB, UT, as the 29th Air Division; formed thru the redesignation of the 4677th Radar Evaluation Squadron, ECM, originally activated 18 Mar 54; transferred to 28th AD 1 Jul 61; transferred to Fourth AF 1 Apr 66; reassigned to Tenth AF 15 Sep 69; .reassigned to Hq ADC 15 Nov 69; moved to Malmstrom AFB, MT o/a 31 Aug 72; reassigned to 24th Air Division 2 Oct 72; inactivated 1 Jul 74. (B-57 acft)..

4677th Radar Evaluation Squadron: activated 18 Mar 54 at Hill AFB, UT, as the CADF, flying B-29 acft; used a few B-25 acft; redesignated from Flight to Squadron 8 Jul 58; converted to B-57 acft 1 Jul 59; transferred to 29th Air Division on 1 Jan 60; inactivated 1 Jan 60 thru redesignation as the 4677th Defense Systems Evaluation Squadron.

In addition to the Radar Evaluation Squadrons, Air Defense Command had two Canberra units dedicated to the jamming training mission: the 4677th Defense Systems Evaluation Squadron at Hill AFB, and the 4713rd DSES at Otis AFB. Both units operated TB-57Es and, in addition, the 4677th operated half a dozen RB-57Ds as high-altitude target planes.

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Maintenance worked its first B-57 Night Intruder through production (applying the TCTO Concept), delivering it to the user on 17 December 1958. By July 1960 the last of this special project went through Maintenance shops. A Hill AFB tenant, 4677th Defense System Evaluation Squadron of Air Defense Command, used the Night Intruder. 3 Nov 1958

The 4677th Defense Systems Evaluation Squadron of ADC at Hill AFB, Utah, received 12 of the RB-57Ds over a period of time which joined the 30 standard wing models of that unit. These aircraft filled the 'target' training mission well, and also mixed in a small amount of high altitude photography. Another use found for ADC RB-57Ds was to supplement SAC assigned 'Ds' for continuous cloud sampling in the vicinity of nuclear bomb tests as with previously described Operation Hard Tack. (As early as 1954, RB-57As were used for Operation Castle in Nevada for this sampling, followed in 1956 by Operation Red Wing at Eniwetok using B-57Bs.) All models of the B-57 proved very useful for this type of work, and the feature liked most about the 'D' was its ability to carry a good-sized payload of sampling sensors higher than any other current aircraft.

After a three-year period during which nuclear testing had been discontinued, plans for tests resumed. This detonation test called Project Dominic, took place in 1962 and, unknown at the time, was the last above ground nuclear shot by the U.S. The 4677th DSES at Hill AFB provided five 'Ds' along with crews. These were joined by the one 'D' from Wright Patterson AFB (973) assigned there for flight test projects. (WADC received three RB-57Ds from the 4080th SRW beginning 16 June 1959.) Six of the standard wing B-57s were also at Christmas Island for this mission. The 1211th Test Squadron (Sampling), Air Weather Service, had operational control over the loaned aircraft and in time acquired permanently assigned WB-57s for the sampling program. This Kirtland AFB, New Mexico, based unit eventually became the 58th Weather Reconnaissance Squadron.

Units operating these specially equipped EB-57s were Defense Systems Evaluation Squadrons (DSES), in theory replacements for tow target units, giving better training against ground and airborne defence systems, realistically simulating an ECM supported attack. Throughout the 1960s there were a number of these units based around the US and a few overseas locations. Eventually most were absorbed into two squadrons of the Aerospace Defence Command. The 4713th DSES in the northeast U.S. was stationed at Stewart AFB, NY, Otis AFB, Mass, and finally Westover AFB, Mass. Aircraft of this unit were often seen in Europe in support of USAF fighter activities. The other unit was the 4677th DSES originating at Hill AFB, Utah, and later moved to Malmstrom AFB, Montana. Its area of interest was primarily Fighter Interceptor Squadron (FIS) training for units guarding the Canadian approaches to the US. In 1974, the 4713th DSES at Westover was inactivated and the aircraft were divided between two Air National Guard units, and the 4677th DSES was redesignated the 17th DSES.

Operating EB-57Es exclusively, this unit was inactivated in July 1979 and was the last to fly Canberras in the USAF. It shared the Defence Systems Evaluation mission with the Kansas and Vermont Air National Guard units, those being the 190th DSEG at Topeka, and the 158th DSEG at Burlington, both flying EB-57Bs. In 1978, the 190th phased into another aircraft and mission, and the 158th DSEG became the last U.S. military unit to fly B-57s. While operating as the last to fly the EB-57s as well, the 158th DSES supported ADC fighter squadron training and all major NORAD exercises throughout the U.S. and Canada.