



F4H-1F 364 Flight Test, Pax River. NASA picked 9 astronauts in second group of 32. Claimed to be "X".

Kenneth W. Weir, MGEN, USMCR (Ret.)
"Ken"

Date of Designation: 30 July 1954 NA # V-4975

Dates of Active Duty: 6 June 1952 - 1 Sept 1966;
1 May - 30 June 1981;
1 June - 31 Aug 1985

Total Flight Hours: 18,500+ Accident free

Carrier/Ship Landings: Fixed wing: 54

Approximate Flight Hours:

Jet: 9,050 Prop: 9,450 VF/VA: 4,650 VRF: 5,000
Other: 4,650+ hrs (6.39 months) in pressure suits above 60,000 feet altitude in high performance airplanes.

Combat Tours:

Vietnam: South Viet Nam Nov. 1964 - Mar. 1965

Aviation Commands:

O-in-C, Special Weapons Delivery Unit VMA-251, Nov. 1956 - Apr. 1957
CO, H&MS-46, 1968 - 1970
CO, VMO-8, 1970 - 1972
CG, 65th Marine Amphibious Brigade, 1979
CG, 4th Marine Air Wing, 1985

Duty Assignment Chronology

1948-1952 Midshipman, U. S. Naval Academy, flight training in N3N seaplanes (First Flight), PBY and SNJs.
1953-1954 Student Naval Aviator, Pensacola, Corpus Christi, Kingsville. Training in SNJ, F6F, SNB and TV-2.
1954-1956 VMF-533 (F2H-4, F9F-5, TV-2s), MCAS Cherry Point, NC. Special Weapons Delivery Pilot. Deployed aboard USS *Lake Champlain*, USS *Bennington* and *Ticonderoga* in F2H-4. Conducted F2H-4 over the shoulder opera-



U-2S Prototype, Lockheed "Skunk Works" Chief Test Pilot - High Altitude Reconnaissance.

1956-1957

tional suitability test of the Mark 7 special weapon from the USS *Bennington* to the Pinecastle, Florida target.

Tactical Air Control Center, Pohang, Korea, VMA-251 (AD-4B/6), Atsugi, Iwakuni, Okanawa, Japan and Philippines.

1957-1959

The Basic School, Quantico, VA. Instructor, the tactical employment of the PACK ANIMAL, close air support and helicopter operations. Flew AD-4,5,T-34 and OEs.

1959

Jet refresher training in F9F-8s, Oletha, KN.

1959-1961

VMF-334 (F8Us), El Toro, CA.

1961

US Navy Test Pilot School (F4D, FJ-3, F11F, T1A, T-28, S2F, UF-1).

1961-1963

Flying Qualities and Performance Branch, Flight Test, Naval Air Test Center, Patuxent River, MD. Flight testing F4H-1,1F, F8Us, A3J, A6, A4, AD-5W, F3H, OV-1, P-3, F-104, T-38 and GV-1. One of the final 32 candidates from which the second group of nine NASA astronauts was selected.

1963

USAF Aerospace Research Pilots School, Air Force Flight Test Center, Edwards Air Force Base Calif. flying F-100, F-101, F-104, F-106, A-26, B-52, T-38 and U-2.

1964-1965

1st MAW Staff Secretary, Iwakuni, Japan flying TF9. VM CJ-1 in RF-8 and EF-10s out of Japan and Korea on elint missions. Assistant G-3, 9th Marine Expeditionary Brigade Southeast Asia, maintaining proficiency in T-33s and F-4B. Served in Danang, Ton San Nut, Saigon, RVN and in Thailand in support of 9th MEB operations.

1965-1966

USAF Manned Orbiting Laboratory, Assistant Chief Flight Crew Division and Chief of Navy Test Operations. Due to the security classification of the MOL program became saddled with a 48 contiguous United States travel restriction to remain in effect until three years following transfer from the program.

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Maintained proficiency in F-104, T-38, T-33s and U-3.

1966 Transferred to the Active Reserve, USMC.

1966-1968 VMA-241 (A4s), NAS Los Alamitos, CA.

1968-1970 CO, H&MS-46 (A4s), MCAS El Toro, CA.

1970-1972 CO, VMO-8 (OV-10s), MCAS El Toro.

1972-1975 XO, MAG-46 (A4s, OV-10s), MCAS El Toro.

1975-1977 Volunteer Training Group and Staff Group Reserve Staff assignment without DIFOT.

1977-1981 Assistant Wing Commander, 4th MAW and CG, 65th Marine Amphibious Brigade for Reserve Combined Arms Exercise at 29 Palms CA. Flew A4s, F4s, OV-10s, C-130, H-46s, H-53 Hueys and Cobra helos. Two tours as Marine Corps Aviation representative on the Reserve Forces Policy Board, OSD.

5/81-6/81 Active Duty as Deputy CG, FMFPAC flying F4S, A4 and H46 at Kanoeha, Hawaii.

1981-1985 Deputy CG, Marine Corps Development and Education Command, Quantico, VA., flying A4s, H-46 and H-53s.

6/85-7/85 Active Duty as CG, 4th Marine Air Wing with headquarters at New Orleans, LA. Flew A4s, F4s, F-18, A6, OV-10, C-130, H-46, H-53, Huey and Cobras.

6/86 Transferred to Inactive Reserve.

11/90 Retired from the Marine Corps Reserve

Summary of Significant Career Events

- (1) Fellow, Past President, Society of Experimental Test Pilots.
- (2) 18,500 + accident free flight hours; 9050 jet hours; 18,300+ hrs. in single crew member airplanes and 17,800+ hrs. in single engine airplanes.
- (3) 4,650+ hrs. testing high performance airplanes, F4H-1, F8U, A3J, F-104, F-106, U-2, TR-1, ER-2, in pressure suits above altitudes of 60,000 feet. = 6.39 months, perhaps more than any other test pilot in the world with the possible exception of a couple of Russian cosmonauts.
- (4) Retired 1 Aug 1993 after testing single place single engine airplanes and their reconnaissance systems above 70,000 feet at age 63 years.
- (5) Over 5,650 hrs in pressure suits, partial and full, USN Goodrich, USAF David Clark, NASA Mercury.
- (6) 27 years as a LOCKHEED test pilot, 22 years as a test pilot in the LOCKHEED SKUNK WORKS, retired Chief Test Pilot for high altitude reconnaissance airplanes.
- (7) First flights of the TR-1A, A4S, and U-2S with single GE F-29 engine that had no airstart capability, and numerous modified LOCKHEED airplanes including the F-104A, G, CF, and S.
- (8) Envelope expansion, structural demonstration and flutter testing in the F-104S, U-2R, TR-1 and A4S. Obtained the Vmax, Gmax flutter end points for the U-2R and TR-1 airplanes above 65,000 feet, the only known flutter data ever obtained at those altitudes.
- (9) First F-104 Sparrow firings obtaining 4 successive direct hits on BQM-34s with inert weapons on 4 separate supersonic live fire intercepts at various aspects.
- (10) Supersonic Flight Test Experience in F8U, F4H-1, F1F, A3J, A5, FJ-4, F9F-8, F-100, F-101, F 104, F-106, F-18, T-38 airplanes. Maximum Mach Number achieved in F-104 was 2.45 IMN. Maximum altitude as a Marine test pilot in Air Force F-104 was 96,400 ft.
- (11) High angle of attack post stall gyrations, spins and spin recovery tests in F-104, F4, F8, U-2, and TR-1.
- (12) Four successful dead stick landings, one at night on unlit runway.
- (13) Successful landing of two U-2 airplanes after being advised by Chief Test Pilot at the time to seriously consider ejecting from both airplanes that had sustained structural damage during flight test.
- (14) Low altitude high speed PIO investigations in the F4H-1F airplane in 1962. The test involved determining the airplanes short period characteristics, both stick free and stick fixed. Extensive quantitative and qualitative data were obtained at combinations of altitude and airspeeds including 1.2 Mach at 1200 feet.
- (15) Testing the F4H-1F flying qualities with the down spring removed from the longitudinal control feel system in 1962. These tests included extensive testing of the static and dynamic longitudinal stability and maneuvering stability throughout the entire envelope. The removal of the downspring from the control system provided neutral speed stability but resulted in being dangerously PIO prone and the project was rejected as unsafe.
- (16) Testing of the F4H-1 automatic throttle during field mirror landings including power responses to changes in angle of attack throughout the approach, touchdown and wave-off.
- (17) Zoom climbs in the F4H-1 to 94,100 feet to determine if an optimum angle of attack could be obtained and maintained for use in effecting recovery over the top at low indicated airspeeds.
- (18) Navy Preliminary Evaluation of the F8E airplane.
- (19) Prototype tests of a modified attack version of the F8E to determine the feasibility of developing a completely new version of the Crusader airplane that evolved into the A7.
- (20) Test of several proposed versions of approach power compensators for the F8s.
- (21) Development of a completely new AFCS in a variable stability about all three axis F8D. Development of the control stick steering, altitude and Mach hold modes.
- (22) Flying qualities of the F8U-1T trainer both front and rear cockpits.
- (23) Max gross weight takeoff and cruise performance tests of an AD-5W with an uprated R-3350 engine.
- (24) Complete handling qualities of an OV-1C airplane with asymmetrically loaded ordinance. Testing terminated at limit point when airplane fell over onto out board wing store pulling out of chocks.
- (25) Tests in the A3J Vigilante to determine spec compliance with certain supersonic maneuvering performance requirements.