

Records, Trophies, and Competitions



Absolute Aviation World Records

The desirability of a standard procedure to certify air records was recognized early in the history of powered flight. In 1905, representatives of Belgium, Germany, the US, Great Britain, France, Spain, Italy, and Switzerland met in Paris to form the Fédération Aéronautique Internationale (FAI), the world body of national aeronautic sporting interests. The FAI

today comprises the national aero clubs of seventy nations and certifies national records as world records.

Since 1922, the National Aeronautic Association (NAA), based in Arlington, Va., has been the US representative to the FAI. The NAA supervises all attempts at world and world-class records in the United States.

Absolute world records are the su-

preme achievements of all the records open to flying machines. Several of these records are more than ten years old. The NAA notes that, "since the performance of many government-backed airplanes ... is wrapped in a blanket of national security, the breaking of some of these records will depend as much on political considerations as technical ones."

Record	Pilot(s)	Aircraft	Route/Location	Date(s)
Speed around the world, .. nonstop, nonrefueled: 115.65 mph (186.11 kph)	Richard Rutan and Jeana Yeager	<i>Voyager</i> experimental aircraft	Edwards AFB, Calif., to Edwards AFB, Calif.	December 14–23, 1986
Great circle distance without landing: 24,986.727 miles (40,212.139 kilometers)	Richard Rutan and Jeana Yeager	<i>Voyager</i> experimental aircraft	Edwards AFB, Calif., to Edwards AFB, Calif.	December 14–23, 1986
Distance in a closed circuit without landing: 24,986.727 miles (40,212.139 kilometers)	Richard Rutan and Jeana Yeager	<i>Voyager</i> experimental aircraft	Edwards AFB, Calif., to Edwards AFB, Calif.	December 14–23, 1986
Altitude: 123,523.58 feet (37,650.00 meters)	Alexander Fedotov	E-266M, a modified MiG-25 "Foxbat"	Podmoskovnoye, USSR	August 31, 1977
Altitude in an aircraft launched from a carrier airplane: 314,750.00 feet (95,935.99 meters)	Maj. Robert M. White, USAF	North American X-15 No. 3 research aircraft	Edwards AFB, Calif.	July 17, 1962
Altitude in horizontal flight: 85,068.997 feet (25,929.031 meters)	Capt. Robert C. Helt, USAF	Lockheed SR-71A "Blackbird" reconnaissance aircraft	Beale AFB, Calif.	July 28, 1976
Speed over a straight course: 2,193.16 mph (3,529.56 kph)	Capt. Eldon W. Joersz, USAF	Lockheed SR-71A "Blackbird" reconnaissance aircraft	Beale AFB, Calif.	July 28, 1976
Speed over a closed circuit: 2,092.294 mph (3,367.221 kph)	Maj. Adolphus H. Bledsoe, Jr., USAF	Lockheed SR-71A "Blackbird" reconnaissance aircraft	Beale AFB, Calif.	July 28, 1976

The Robert J. Collier Trophy

This award, presented by the National Aeronautic Association, is the most prestigious in American aviation. It recognizes the "greatest achievement in aeronautics or astronautics in America, with respect to

improving the performance, efficiency, and safety of air or space vehicles, the value of which has been thoroughly demonstrated by actual use during the preceding year." The award is named for a prominent pub-

lisher, sportsman, and aviator. Mr. Collier, the first person to purchase a Wright airplane for personal use, commissioned the trophy and presented it to the Aero Club of America (the forerunner of the NAA) in 1911.

- 1911 **Glenn H. Curtiss.** Hydro-airplane.
- 1912 **Glenn H. Curtiss.** Flying boat.
- 1913 **Orville Wright.** Automatic stabilizer.
- 1914 **Elmer A. Sperry.** Gyroscopic control.
- 1915 **W. Sterling Burgess.** Burgess-Dunner hydro-aeroplane.
- 1916 **Elmer A. Sperry.** Drift indicator.
- 1917-20 **No award.** (World War I).
- 1921 **Grover Loening.** Aerial yacht.
- 1922 **US Mail Service.**
- 1923 **US Mail Service.** Night flying.
- 1924 **US Army.**
- 1925 **S. Albert Reed.** Metal propeller.
- 1926 **Maj. E. L. Hoffman.** Practical parachute.
- 1927 **Charles L. Lawrance.** Radial air-cooled engine.
- 1928 **Commerce Dept., Aeronautics Branch.** Airways, air navigation facilities.
- 1929 **National Advisory Committee for Aeronautics.** NACA cowling.
- 1930 **Harold Pitcairn and staff.** Autogiro.
- 1931 **Packard Motor Car Co.** Aircraft diesel engine.
- 1932 **Glenn L. Martin.** Two-engined, high-speed, weight-carrying airplane.
- 1933 **Hamilton Standard Propeller Co., Frank W. Caldwell.** Controllable-pitch propeller.
- 1934 **Maj. Albert F. Hegenberger.** Blind landing experiments.
- 1935 **Donald Douglas and staff.** DC-2.
- 1936 **Pan American Airways.** Transpacific and overwater operations.
- 1937 **Army Air Corps.** Design, equipment of substratosphere airplane.
- 1938 **Howard Hughes and crew.** Around-the-world flight.
- 1939 **US airlines.** Air travel safety record.
- 1940 **Dr. Sanford Moss, Army Air Corps.** Supercharger.
- 1941 **Air Forces and airlines.** Worldwide operations.
- 1942 **Gen. H. H. Arnold.** Leadership of US Army Air Forces.
- 1943 **Capt. Luis De Flores, USNR.** Synthetic training devices.
- 1944 **Gen. Carl A. Spaatz.** US air campaign against Germany.
- 1945 **Dr. Luis W. Alvarez.** Ground-controlled approach radar landing system.
- 1946 **Lewis A. Rodert.** Thermal ice-prevention system.
- 1947 **John Stack, Lawrence D. Bell, Capt. Charles E. Yeager.** Supersonic flight.
- 1948 **Radio Technical Commission for Aeronautics.** All-weather air traffic control system.
- 1949 **William P. Lear.** F-5 automatic pilot, automatic control coupler system.
- 1950 **Helicopter industry, military services, Coast Guard.** Rotary-wing aircraft in air rescue.
- 1951 **John Stack, associates at Langley Aeronautical Laboratory, NACA.** Transonic wind tunnel throat.
- 1952 **Leonard S. Hobbs.** J57 jet engine.
- 1953 **James H. Kindelberger, Edward H. Heinemann.** Supersonic airplanes.
- 1954 **Richard Travis Whitcomb.** Discovery, verification of area rule.
- 1955 **William M. Allen, Boeing Airplane Co., Gen. Nathan F. Twining, USAF.** B-52 bomber.
- 1956 **Charles I. McCarthy, Chance-Vought Aircraft; Vice Adm. James S. Russell, US Navy Bureau of Aeronautics.** F8U Crusader.
- 1957 **Edward P. Curtis.** "Aviation Facilities Planning" report.
- 1958 **US Air Force/Lockheed/GE F-104 team.** F-104 interceptor. **Clarence L. Johnson.** F-104 airframe design. **Neil Burgess, Gerhard Neumann.** J79 turbojet engines. **Maj. Howard C. Johnson.** Landplane altitude record. **Capt. Walter W. Irwin.** Straightaway speed record.
- 1959 **US Air Force, GD-Convair, Space Technologies Laboratories.** Atlas ICBM.
- 1960 **Vice Adm. William F. Raborn.** Polaris ballistic missile system.
- 1961 **Maj. Robert M. White, Joseph A. Walker, A. Scott Crossfield, Cmdr. Forrest Petersen.** X-15 test flights.
- 1962 **Lt. Cmdr. M. Scott Carpenter, Maj. L. Gordon Cooper, Lt. Col. John H. Glenn, Jr., Maj. Virgil I. Grissom, Cmdr. Walter M. Schirra, Jr., Cmdr. Alan B. Shepard, Jr., Maj. Donald K. Slayton.** Pioneering US manned spaceflight.
- 1963 **Clarence L. Johnson.** A-11 Mach 3 aircraft.
- 1964 **Gen. Curtis E. LeMay.** Lifetime achievement in airpower and defense.
- 1965 **James E. Webb, Hugh L. Dryden.** Gemini spaceflight program.
- 1966 **James S. McDonnell.** F-4 Phantom and Gemini space vehicles.
- 1967 **Lawrence A. Hyland, Hughes Aircraft Co., Jet Propulsion Laboratory, associated organizations.** Surveyor Program.
- 1968 **Col. Frank Borman, Capt. James A. Lovell, Jr., Lt. Col. William A. Anders, US spaceflight team.** Apollo 8, first manned lunar orbit mission.
- 1969 **Neil A. Armstrong, Col. Edwin E. Aldrin, Jr., Col. Michael Collins.** Apollo 11 moon landing.
- 1970 **Boeing Co., Pratt & Whitney, Pan Am.** Commercial 747 service.
- 1971 **Col. David R. Scott, Col. James B. Irwin, Lt. Col. Alfred M. Worden, Dr. Robert T. Gilruth.** Apollo 15 mission.
- 1972 **Adm. Thomas H. Moorer, USAF Seventh and Eighth Air Forces, Navy Task Force 77.** Operation Linebacker II.
- 1973 **Skylab Program, William C. Schneider, Skylab astronauts.** Skylab operations.
- 1974 **John F. Clark, NASA; Daniel J. Fink, GE; NASA-industry LANDSAT team; RCA; Hughes.** Space technology in resource and environmental management.
- 1975 **David S. Lewis, General Dynamics, USAF-industry team.** F-16 aviation technologies.
- 1976 **USAF, Rockwell, B-1 industry team.** The B-1 bomber.
- 1977 **Gen. Robert J. Dixon and Tactical Air Command.** Red Flag.
- 1978 **Sam B. Williams, Williams Research Corp.** Turbofan cruise missile engines.
- 1979 **Paul B. MacCready, Aeroenvironment, Bryan Allen.** *Gossamer Albatross*.
- 1980 **NASA's Voyager mission team, Dr. Edward Stone.** *Voyager* flyby of Saturn.
- 1981 **NASA, Rockwell, Martin Marietta Corp., Thiokol Corp., government-industry shuttle team, and astronauts John W. Young, Capt. Robert L. Crippen, Col. Joe H. Engle, Capt. Richard H. Truly.** First flight of *Columbia*, first shuttle.
- 1982 **T. A. Wilson, Boeing Co., supported by the FAA, industry, airlines.** 757 and 767 airliners.
- 1983 **US Army, Hughes Helicopters, industry team.** AH-64A Apache helicopter.

The Robert J. Collier Trophy

- 1984 **NASA, Martin Marietta Corp., Astronaut Capt. Bruce McCandless II, Charles E. Whitsett, Jr., Walter W. Bollendonk.** Manned maneuvering units, satellite rescues.
- 1985 **Russell W. Meyer, Cessna Aircraft Co., Cessna Citation business jets.** Outstanding safety.
- 1986 **Jeana L. Yeager, Richard G. Rutan, Elbert L. Rutan, Bruce Evans, team of volunteers.** *Voyager* flight.
- 1987 **NASA Lewis Research Center, NASA-industry team.** Advanced turboprop propulsion concepts.
- 1988 **Rear Adm. Richard H. Truly.** Manned space recovery program.
- 1989 **Ben R. Rich, Lockheed-USAF team.** F-117A Stealth fighter.
- 1990 **Bell-Boeing team.** V-22 Osprey aircraft.
- 1991 **Northrop-USAF industry team.** B-2 bomber.
- 1992 **Aerospace Corp., Rockwell International Corp., IBM Federal Systems Co., US Naval Research Laboratory, USAF.** Navstar Global Positioning System.
- 1993 **Hubble Space Telescope recovery team.** NASA Mission Directors: **Joseph Rothenberg, Brewster Shaw, J. Milton Heflin, Randy Brinkley,** and crew members of the space shuttle *Endeavour*: **Col. Richard O. Covey, Lt. Col. Tom D. Akers, Cmdr. Kenneth D. Bowersox, Kathryn C. Thornton, Claude Nicollier, Jeffrey Hoffman, F. Story Musgrave.**
- 1994 **US Air Force, McDonnell Douglas Corp., C-17 industry team.** C-17 airlifter.
- 1995 **Boeing 777 team.** Boeing 777.

The Hughes Achievement Trophy

The Hughes Achievement Trophy is presented annually to the top Air Force squadron with an air defense mission. Hughes Aircraft Co. sponsors the award.

Year	Unit, Base	Aircraft
1953	58th FIS, Otis AFB, Mass.	F-94C
1954	96th FIS, New Castle County Airport, Del.	F-94C
1955	496th FIS, Landstuhl AB, West Germany	F-86D
1956	317th FIS, McChord AFB, Wash.	F-86D/F-102A
1957	512th FIS, RAF Bentwaters, England	F-86D
1958	31st FIS, Elmendorf AFB, Alaska	F-102A
1959	54th FIS, Ellsworth AFB, S. D.	F-89J
1960	460th FIS, Portland IAP, Ore.	F-102A
1961	83d FIS, Hamilton AFB, Calif.	F-101B
1962	444th FIS, Charleston AFB, S. C.	F-101B
1963	497th FIS, Torrejon AB, Spain	F-102A
1964	329th FIS, George AFB, Calif.	F-106A/B
1965	317th FIS, Elmendorf AFB, Alaska	F-102A
1966	32d FIS, Soesterberg AB, the Netherlands	F-102A
1967	317th FIS, Elmendorf AFB, Alaska	F-106A/B
1968	64th FIS, Clark AB, the Philippines	F-102A
1969	71st FIS, Malmstrom AFB, Mont.	F-106A/B
1970	57th FIS, NAS Keflavik, Iceland	F-102A
1971	48th FIS, Langley AFB, Va.	F-106A/B
1972	43d TFS, Elmendorf AFB, Alaska	F-4E
1973	555th TFS, Udorn RTAFB, Thailand	F-4D
1974	119th FIG (ANG), Hector Field, N. D.	F-101B
1975	318th FIS, McChord AFB, Wash.	F-106A/B
1976	57th FIS, NAS Keflavik, Iceland	F-4C
1977	43d TFS, Elmendorf AFB, Alaska	F-4E
1978	49th FIS, Griffiss AFB, N. Y.	F-106A/B
1979	32d TFS, Soesterberg AB, the Netherlands	F-15A/B
1980	32d TFS, Soesterberg AB, the Netherlands	F-15A/B
1981	12th TFS, Kadena AB, Japan	F-15C/D
1982	44th TFS, Kadena AB, Japan	F-15C/D
1983	67th TFS, Kadena AB, Japan	F-15C/D
1984	318th FIS, McChord AFB, Wash.	F-15A/B
1985	120th FIG (ANG), Great Falls IAP, Mont.	F-106A/B
1986	67th TFS, Kadena AB, Japan	F-15C/D
1987	57th FIS, NAS Keflavik, Iceland	F-15C/D
1988	22d TFS, Bitburg AB, West Germany	F-15C/D
1989	67th TFS, Kadena AB, Japan	F-15C/D
1990	58th TFS, Eglin AFB, Fla.	F-15C/D
1991	58th TFS, Eglin AFB, Fla.	F-15C/D
1992	59th FS, Eglin AFB, Fla.	F-15C/D
1993	71st FS, Langley AFB, Va.	F-15C
1994	178th FS (ANG), Hector IAP, N. D.	F-16A/B
1995	178th FS (ANG), Hector IAP, N. D.	F-16A/B

The Mackay Trophy

The Mackay Trophy was established by Clarence H. Mackay, an industrialist, philanthropist, commu-

nications pioneer, and aviation enthusiast. Presented by the National Aeronautic Association, the trophy

recognizes "the most meritorious flight of the year" by an Air Force member, members, or organization.

- 1912** 2d Lt. Henry H. Arnold.
1913 2d Lt. Joseph E. Carberry and 2d Lt. Fred Seydel.
1914 Capt. Townsend F. Dodd and Lt. Shapler W. Fitzgerald.
1915 Lt. B. W. Jones.
1916-17 Inactive.
1918 Lt. Edward V. Rickenbacker.
1919 Lt. Belvin W. Maynard, Lt. Alexander Pearson, Jr., Lt. R. S. Worthington, Capt. John O. Donaldson, Capt. Lowell H. Smith, Lt. Col. Harold E. Hartney, Lt. E. H. Manzelman (posthumously), Lt. R. G. Bagby, Lt. D. B. Gish, and Capt. F. Steinkle.
1920 Capt. St. Clair Streett, Capt. Howard T. Douglas, 1st Lt. Clifford C. Nutt, 2d Lt. Erik H. Nelson, 2d Lt. C. H. Crumrine, 2d Lt. Ross C. Kirkpatrick, Sgt. Edmond Henriques, Sgt. Albert T. Vierra, and Sgt. Joseph E. English.
1921 Lt. John A. Macready.
1922 Lt. John A. Macready and Lt. Oakley G. Kelly.
1923 Lt. John A. Macready and Lt. Oakley G. Kelly.
1924 Capt. Lowell H. Smith, 1st Lt. Leigh Wade, 1st Lt. Leslie P. Arnold, 1st Lt. Erik H. Nelson, 2d Lt. John Harding, Jr., and 2d Lt. Henry H. Ogden.
1925 Lt. Cyrus Bettis and Lt. James H. Doolittle.
1926 Maj. Herbert A. Dargue, Capt. Ira C. Eaker, Capt. Arthur B. McDaniel, Capt. C. F. Wolsey (posthumously), 1st Lt. J. W. Benton (posthumously), 1st Lt. Charles McRobinson, 1st Lt. Muir S. Fairchild, 1st Lt. Bernard S. Thompson, 1st Lt. Leonard D. Weddington, and 1st Lt. Ennis C. Whitehead.
1927 Lt. Albert F. Hegenberger and Lt. Lester J. Maitland.
1928 1st Lt. Harry A. Sutton.
1929 Capt. Albert W. Stevens.
1930 Maj. Ralph Royce.
1931 Maj. Gen. Benjamin D. Foulois.
1932 1st Lt. Charles H. Howard.
1933 Capt. Westside T. Larson.
1934 Brig. Gen. Henry H. Arnold.
1935 Maj. Albert W. Stevens and Capt. Orville Anderson.
1936 Capt. Richard E. Nugent, 1st Lt. Joseph A. Miller, 1st Lt. Edwing G. Simenson, 2d Lt. William P. Ragsdale, Jr., 2d Lt. Burton W. Armstrong, 2d Lt. Herbert Morgan, Jr., TSgt. Gilbert W. Olsen, SSgt. Howard M. Miller, and Corpsman 2d Class Frank B. Conner.
1937 Capt. Carl J. Crane and Capt. George V. Holloman.
1938 2d Bombardment Group (General Headquarters Air Force). All those in the 2d Bombardment Group at the time of the "Good Will" flight to Buenos Aires, Argentina, February 15-27, 1938, should be considered recipients.
1939 Maj. Caleb V. Haynes, Maj. William D. Old, Capt. John A. Samford, Capt. Richard S. Freeman, 1st Lt. Torgils G. Wold, MSgt. Adolph Cattarius, TSgt. Henry L. Hines, TSgt. William J. Heldt, TSgt. David L. Spicer, SSgt. Russel E. Junior, and SSgt. James E. Sands. Earthquake relief mission to Chile.
1940-46 Inactive.
1947 Capt. Charles E. Yeager. First supersonic flight.
1948 Lt. Col. Emil Beaudry. Rescue in Greenland.
1949 Capt. James G. Gallagher and crew of *Lucky Lady II*. First around-the-world, nonstop flight.
1950 27th Fighter Escort Wing. Transatlantic movement of 180 fighters.
1951 Col. Fred J. Ascani. Speed record, 635.686 mph.
1952 Maj. Louis H. Carrington, Jr., Maj. Frederick W. Shook, and Capt. Wallace D. Yancey. First nonstop, transpacific flight of RB-45 jet bomber.
1953 40th Air Division, SAC. Nonstop, refueled transatlantic movement of fighters.
1954 308th Bombardment Wing (M). "Leapfrog" intercontinental maneuver.
1955 Col. Horace A. Hanes. Speed record, 822.135 mph.
1956 Capt. Iven C. Kincheloe, Jr., Air Research and Development Command. Altitude record in Bell X-2.
1957 93d Bombardment Wing, SAC. Three B-52s, in first nonstop, around-the-world jet flight.
1958 TAC Composite Air Strike Force, X-Ray Tango. Rapid deployment to Far East.
1959 4520th Aerial Demonstration Team. Goodwill tour of Far East.
1960 6593d Test Squadron (Special). Aerial recoveries of space capsules.
1961 Lt. Col. William R. Payne, Maj. William L. Polhemus, and Maj. Raymond R. Wagener, 43d Bomb Wing, SAC. Carswell AFB, Tex.-to-Paris nonstop flight, two speed records.
1962 Maj. Robert G. Sowers, Capt. Robert McDonald, and Capt. John T. Walton. Three transcontinental speed records in B-58.
1963 Capt. Warren P. Tomsett, Capt. John R. Ordemann, Capt. Donald R. Mack, TSgt. Edsol P. Inlow, SSgt. Jack E. Morgan, and SSgt. Frank C. Barrett. Nighttime, under-fire evacuation of wounded in Vietnam.
1964 464th Troop Carrier Wing, TAC. Refugee airlift in Republic of Congo.
1965 YF-12A/SR-71 Test Force (Col. Robert L. Stephens, Lt. Col. Daniel Andre, Lt. Col. Walter F. Daniel, Maj. Noel T. Warner, and Maj. James P. Cooney). YF-12A flight that established nine speed and altitude records.
1966 Col. Albert R. Howarth. Courage and airmanship in southeast Asia.
1967 Maj. John J. Casteel, Capt. Dean L. Hoar, Capt. Richard L. Trail, and MSgt. Nathan C. Campbell. First emergency multiple air refuelings.
1968 Lt. Col. Daryl D. Cole. Conspicuous gallantry as C-130 pilot in southeast Asia.
1969 49th Tactical Fighter Wing, TAC. Deployment, with 504 air refuelings, of 72 F-4Ds from West Germany to New Mexico.
1970 Capt. Alan D. Milacek and AC-119K crew (Capt. James A. Russell, Capt. Roger E. Clancy, Capt. Ronald C. Jones, Capt. Brent C. O'Brien, TSgt. Albert A. Nash, SSgt. Adolfo Lopez, Jr., SSgt. Ronald R. Wilson, Sgt. Kenneth E. Firestone, and A1C Donnell H. Cofer). Destruction of targets with a severely damaged aircraft.
1971 Lt. Col. Thomas B. Estes and Lt. Col. Dewain C. Vick. SR-71 record-shattering flights.
1972 Capt. Richard S. "Steve" Ritchie, Capt. Charles B. DeBellevue, and Capt. Jeffrey S. Feinstein. USAF's Vietnam War aces.
1973 MAC aircrews. Operation Homecoming, POWs' return.
1974 Maj. Roger J. Smith, Maj. David W. Peterson, and Maj. Willard R. MacFarlane. Operation Streak Eagle (F-15) test pilots.
1975 Maj. Robert W. Undorf. Gallantry in *Mayaguez* incident.
1976 Capt. James A. Yule. Gallantry as instructor of B-52D flight.
1977 C-5 Aircrew, Mission AAM 1962-01 (Capt. David M. Sprinkel and crew). US-USSR energy research project.
1978 C-5 Aircrew, Mission AM 770021 (Lt. Col. Robert F. Schultz and crew and Capt. Todd H. Hohberger and crew, 436th Military Airlift Wing). C-5 airlift to Zaire.
1979 Maj. James E. McArdle, Jr. Rescue of 28 Taiwanese at sea.
1980 Crews S-21 and S-31, 644th Bombardment Squadron. Nonstop, around-the-world mission to locate Soviet Navy operating in Arabian Sea.

The Mackay Trophy

- 1981 Capt. John J. Walters. Air rescue mission in Alaskan waters.
- 1982 B-52 Crew E-21, 19th Bombardment Wing. Successful emergency landing of B-52.
- 1983 Crew E-113, 42d Bombardment Wing, SAC. Emergency refueling and towing of an F-4E.
- 1984 Lt. Col. James L. Hobson, Jr. MC-130 assault in Grenada.
- 1985 Lt. Col. David E. Faught. Emergency KC-135 landing.
- 1986 KC-10 crew, 68th Air Refueling Group, SAC. Emergency transatlantic refueling of Marine A-4s.
- 1987 Det. 15, USAF Plant Representative Office, and B-1B SPO. 72 record B-1B flights.
- 1988 C-5 crew, 436th Military Airlift Wing. Mission to Semipalatinsk, USSR, as part of INF accord.
- 1989 B-1B crew, 96th Bombardment Wing. Emergency landing of B-1B.
- 1990 AC-130 crew, 16th Special Operations Squadron. Panama operations.
- 1991 MH-53 crew, 20th Special Operations Squadron. Rescue of downed Navy F-14 pilot inside Iraq during Persian Gulf War.
- 1992 C-130 crew (13 Air Combat Command members and one Air Force Intelligence Command member). Emergency landing of unarmed C-130 after incurring heavy damage from two Peruvian fighters in international airspace.
- 1993 B-52 crew, 668th Bomb Squadron, ACC. Successful emergency landing of B-52 after loss of four engines.
- 1994 HH-60G crew of Air Force Rescue 206 and 208, 56th Rescue Squadron, ACC, NAS Keflavik, Iceland. Rescue of six Icelandic sailors from foundered merchant vessel *Godinn*.
- 1995 Aircrew BAT-01, Dyess AFB, Tex., demonstrated the B-1B's endurance and speed by flying thirty-six hours, thirteen minutes, thirty-six seconds in an around-the-world flight from Dyess AFB.

Proud Shield

Proud Shield is the Air Force's biennial long-range bombing and navigation competition. Begun by Gen. George C. Kenney, the first commander of SAC, the competition is run by Air Combat Command. The Gen. Muir S. Fairchild Trophy, named for the first commander of Air University, is awarded to the wing with the highest competition effectiveness. The next competition is scheduled for summer 1996.

Fairchild Trophy Recipients

Year	Unit(s)	Aircraft
1948	43d BG, Davis-Monthan AFB, Ariz. ^a	B-29
1949	93d BG, Castle AFB, Calif. ^a	B-29
1950	No competition	
1951	97th BMW, Biggs AFB, Tex.	B-50D
1952	93d BMW, Castle AFB, Calif.	B-50D
	97th BMW, Biggs AFB, Tex. (tie)	B-50D
1953	92d BMW, Fairchild AFB, Wash.	B-36D
1954	11th BMW, Carswell AFB, Tex.	B-36H
1955	320th BMW, March AFB, Calif.	YRB-47B
1956	11th BMW, Carswell AFB, Tex.	B-36H
1957	321st BMW, Pinecastle AFB, Fla.	B-47B
1958	306th BMW, MacDill AFB, Fla.	B-47E
1959	307th BMW, Lincoln AFB, Neb.	B-47E
1960	11th BMW, Altus AFB, Okla.	B-52E
1961	4137th SW, Robins AFB, Ga.	B-52G
1962	No competition	
1963	2d BMW, Barksdale AFB, La. ^b	B-52F
1964	70th BMW, Clinton-Sherman AFB, Okla. ^b	B-52E
1965	454th BMW, Columbus AFB, Miss.	B-52F
1966	19th BMW, Homestead AFB, Fla.	B-52H
1967-68	No competition	
1969	319th BMW, Grand Forks AFB, N. D.	B-52H
1970	93d BMW, Castle AFB, Calif.	B-52F
1971	449th BMW, Kincheloe AFB, Mich.	B-52H
1972-73	No competition	
1974	380th BMW, Plattsburgh AFB, N. Y.	FB-111A
1975	No competition	
1976	380th BMW, Plattsburgh AFB, N. Y.	FB-111A
1977	380th BMW, Plattsburgh AFB, N. Y.	FB-111A
1978	380th BMW, Plattsburgh AFB, N. Y.	FB-111A
1979	509th BMW, Pease AFB, N. H.	FB-111A
1980	320th BMW, Mather AFB, Calif.	B-52G
1981	509th BMW, Pease AFB, N. H.	FB-111A
1982	509th BMW, Pease AFB, N. H.	FB-111A
1983	509th BMW, Pease AFB, N. H.	FB-111A
1984	380th BMW, Plattsburgh AFB, N. Y.	FB-111A
1985	97th BMW, Blytheville AFB, Ark.	B-52G
1986	92d BMW, Fairchild AFB, Wash.	B-52H
1987	379th BMW, Wurtsmith AFB, Mich.	B-52G
1988	5th BMW, Minot AFB, N. D.	B-52H
1989	28th BMW, Ellsworth AFB, S. D.	B-1B
1990-91	No competition	
1992	92d BW, Fairchild AFB, Wash.	B-52H
1994	27th FW, Cannon AFB, N. M.	F-111F

^aOverall winner; Fairchild Trophy not yet developed.

^bTrophy given for overall annual performance, not for scores in SAC bombing and navigation competition.

Guardian Challenge

Guardian Challenge is the Air Force Space Command competition to determine the best space operations and missile teams in the Air Force. Held at Vandenberg AFB, Calif., it replaces Olympic Arena, the winner of which received a trophy named for former USAF Vice Chief of Staff Gen. William

H. Blanchard. Guardian Challenge awards the Blanchard Trophy to the best missile operations crew. AFSPC first awarded the Chennault Trophy (for best space operations crew) in 1994 and replaced it in 1995 with the O'Malley, Arnold, Schriever, and Aldridge Trophies. The Aldridge Trophy,

named for former USAF Secretary Edward C. "Pete" Aldridge, goes to the best satellite operations unit; the Schriever Trophy goes to the best space launch squadron; the O'Malley Trophy goes to the best space warning squadron; and the Arnold Trophy goes to the best space surveillance squadron.

Blanchard Trophy Recipients

Year, Unit(s)	System	Year, Unit(s)	System
1967 351st SMW, Whiteman AFB, Mo.	Minuteman	1982 44th SMW, Ellsworth AFB, S. D.	Minuteman
1968 No competition		1983 381st SMW, McConnell AFB, Kan.	Titan
1969 321st SMW, Grand Forks AFB, N. D.	Minuteman	1984 90th SMW, F. E. Warren AFB, Wyo.	Minuteman
1970 44th SMW, Ellsworth AFB, S. D.	Minuteman	1985 308th SMW, Little Rock AFB, Ark.	Titan
1971 351st SMW, Whiteman AFB, Mo.	Minuteman	1986 341st SMW, Malmstrom AFB, Mont.	Minuteman
1972 381st SMW, McConnell AFB, Kan.	Titan	1987 321st SMW, Grand Forks AFB, N. D.	Minuteman
1973 90th SMW, F. E. Warren AFB, Wyo.	Minuteman	1988 91st SMW, Minot AFB, N. D.	Minuteman
1974 321st SMW, Grand Forks, N. D.	Minuteman	1989 351st SMW, Whiteman AFB, Mo.	Minuteman
1975 381st SMW, McConnell AFB, Kan.	Titan	1990 341st SMW, Malmstrom AFB, Mont.	Minuteman
1976 341st SMW, Malmstrom AFB, Mont.	Minuteman	1991 341st SMW, Malmstrom AFB, Mont.	Minuteman
1977 351st SMW, Whiteman AFB, Mo.	Minuteman	1992 44th MW, Ellsworth AFB, S. D.	Minuteman
1978 91st SMW, Minot AFB, N. D.	Minuteman	1993 351st MW, Whiteman AFB, Mo.	Minuteman
1979 390th SMW, Davis-Monthan AFB, Ariz.	Titan	1994 742d MS, Minot AFB, N. D.	Minuteman
1980 381st SMW, McConnell AFB, Kan.	Titan	1995 10th MS, Malmstrom AFB, Mont.	Minuteman
1981 351st SMW, Whiteman AFB, Mo.	Minuteman		

Chennault Trophy Recipients

Year, Unit(s)	System
1994 3d SLS, Patrick AFB, Fla.	Atlas II

O'Malley Trophy Recipients

Year, Unit(s)	System
1995 8th SWS, Eldorado AS, Tex.	Pave Paws

Aldridge Trophy Recipients

Year, Unit(s)	System
1995 6th SOPS, Offutt AFB, Neb.	DMSP

Arnold Trophy Recipients

Year, Unit(s)	System
1995 17th SPSS, RAF Edzell, UK	LASS

Schriever Trophy Recipients

Year, Unit(s)	System
1995 1st SLS, Cape Canaveral AS, Fla.	Delta II

The William Tell Weapons Meet

The Air Force's William Tell air-to-air weapons meet, held at Tyndall AFB, Fla., includes events for pilots, weapons controllers, weapons loaders, and maintainers to provide a complete test for a unit in the air-to-air business. The next meet is scheduled for October 1996.

William Tell Winners

Year	Unit, Base	Aircraft
1954	3550th FTW (Interceptor), Moody AFB, Ga.	F-94C
1955	26th Air Division, Duluth MAP, Minn. (Members of the 48th, 96th, and 332d FISs)	F-94C
1956	94th FIS, Selfridge AFB, Mich.	F-86D
1958	465th FIS, Griffiss AFB, N. Y.	F-89J
	326th FIS, Richards-Gebaur AFB, Mo.	F-102A
	125th FIG (ANG), Jacksonville IAP, Fla.	F-86D
1959	319th FIS, Bunker Hill AFB, Ind.	F-89J
	460th FIS, Portland IAP, Ore.	F-102A
	538th FIS, Larson AFB, Wash.	F-104A

The William Tell Weapons Meet

1961	445th FIS, Wurtsmith AFB, Mich.	F-101B
	59th FIS, Goose Bay, Labrador, Canada	F-102A
	456th FIS, Castle AFB, Calif.	F-106A
1963	445th FIS, Wurtsmith AFB, Mich.	F-101B
	146th FIS (ANG), Greater Pittsburgh IAP, Pa.	F-102A
	318th FIS, McChord AFB, Wash.	F-106A
1965	62d FIS, K. I. Sawyer AFB, Mich.	F-101B
	32d FIS, Camp New Amsterdam, the Netherlands	F-102A
	71st FIS, Selfridge AFB, Mich.	F-106A
	331st FIS, Webb AFB, Tex.	F-104A
1966-69	No competition	
1970	119th TFG (ANG), Hector Field, N. D.	F-101B
	148th TFG (ANG), Duluth IAP, Minneapolis, Minn.	F-102A
	71st FIS, Malmstrom AFB, Mont.	F-106A
1972	119th TFG (ANG), Hector Field, N. D.	F-101B
	115th TFG (ANG), Truax Field, Wis.	F-102A
	460th FIS, Grand Forks AFB, N. D.	F-106A
1974	101st TFG (ANG), Bangor IAP, Me.	F-101B
	124th FIG (ANG), Boise Air Terminal, Idaho	F-102A
	120th FIG (ANG), Great Falls IAP, Mont.	F-106A
1976	142d FIG (ANG), Portland IAP, Ore.	F-101B
	4th TFW, Seymour Johnson AFB, N. C.	F-4E
	120th FIG (ANG), Great Falls IAP, Mont.	F-106A
1978	147th FIG (ANG), Ellington AFB, Tex.	F-101B
	86th TFW, Ramstein AB, West Germany	F-4E
	49th FIS, Griffiss AFB, N. Y.	F-106A
1980	147th FIG (ANG), Ellington AFB, Tex.	F-101B
	347th TFW, Moody AFB, Ga.	F-4E
	144th FIW (ANG), Fresno ANGB, Calif. ^a	F-106A
1982	409 Squadron, CFB Comox, British Columbia, Canada	CF-101B
	18th TFW, Kadena AB, Japan ^a	F-15C
	49th FIS, Griffiss AFB, N. Y.	F-106A
	57th FIS, NAS Keflavik, Iceland	F-4E
1984	33d TFW, Eglin AFB, Fla. ^a	F-15C
	142d FIG (ANG), Portland IAP, Ore.	F-4C
	177th FIG (ANG), Atlantic City IAP, N. J.	F-106A
1986	33d TFW, Eglin AFB, Fla. ^a	F-15C
	119th FIG (ANG), Hector Field, N. D.	F-4D
1988	49th TFW, Holloman AFB, N. M. ^a	F-15A
	33d TFW, Eglin AFB, Fla.	F-15C
	18th TFW, Kadena AB, Japan	F-15C
	57th FIS, NAS Keflavik, Iceland	F-15C
1990	No competition	
1992	18th Wing, Kadena AB, Japan	F-15C
1994	119th FG (ANG), Fargo, N. D.	F-16A

^aOverall competition winner. The naming of an overall winner began with William Tell 1980.

William Tell Top Guns

Year	Top Gun	Aircraft
1954	Crew of Capt. Clarence W. Lewis and 1st Lt. James R. Boone, 3550th FTW (Interceptor), Moody AFB, Ga.	F-94C
1955	Crew of Col. B. H. King and Lt. F. S. Goad, 26th Air Division, Duluth MAP, Minn.	F-94C
1956	Crew of Col. Donald W. Graham and 1st Lt. Billy R. Thomson, 66th FIS, Elmendorf AFB, Alaska	F-89D
	1st Lt. Robert B. Long, 94th FIS, Selfridge AFB, Mich.	F-86D
1958	Crew piloted by Col. Frank J. Keller, 465th FIS, Griffiss AFB, N. Y.	F-89J
	Col. Roy B. Caviness, 482d FIS, Seymour Johnson AFB, N. C.	F-102A
	Col. Robert E. Dawson, 125th FIG, Jacksonville IAP, Fla.	F-86D
1959	Crew of Capt. Billy S. Linebaugh and 1st Lt. Donald M. Burke, 319th FIS, Bunker Hill AFB, Ind.	F-89J
	Capt. Frederick H. England, 460th FIS, Portland IAP, Ore.	F-102A
	Maj. John T. Guice, 125th FIG, Jacksonville IAP, Fla.	F-100A
1961	Lt. Col. Frank R. Jones, 59th FIS, Goose Bay, Labrador, Canada	F-102A
1963	Lt. Col. J. W. Rogers, 317th FIS, Elmendorf AFB, Alaska	F-102A
1965	Crew of Capt. D. E. Libby and Capt. L. R. Livingston, 62d FIS, K. I. Sawyer AFB, Mich.	F-101B
	Capt. J. McMichael, 326th FIS, Richards-Gebaur AFB, Mo.	F-102A
	Lt. Col. Glendon P. Dunaway, 71st FIS, Selfridge AFB, Mich.	F-106A
	Capt. J. D. Dunn, 319th FIS, Homestead AFB, Fla.	F-104A

The William Tell Weapons Meet

Year	Top Gun	Aircraft
1966-69	No competition	
1970	Crew of Capt. James Reimers and Capt. Arthur Jacobson, 119th TFG (ANG), Hector Field, N. D.	F-101B
1972	Crew of Capt. Lowell Butters and Capt. Douglas Danko, 425th All-Weather Fighter Squadron, Bagotville, Quebec, Canada	CF-101B
1974	Maj. Ralph D. Townsend, 124th FIG (ANG), Boise Air Terminal, Idaho	F-102A
1976	Crew of Maj. Bradford A. Newell and Lt. Col. Donald R. Tonole, 142d FIG (ANG), Portland IAP, Ore.	F-101B
1978	Crew of Earl G. Robertson and Capt. Brian J. Salmon, Canadian Forces Composite Group	CF-101B
1980	Crew of Lt. Col. Maurice Udell and Maj. David S. Miller, 147th FIG (ANG), Ellington AFB, Tex.	F-101B
1982	Crew of Maj. Bob Worbets and Capt. Bill Ricketts, 409 Squadron, CFB Comox, British Columbia, Canada	CF-101B
	Lt. Col. Jere Wallace, 18th TFW, Kadena AB, Japan	F-15C
	Lt. Col. Robert Boehringer, 144th FIW, Fresno ANGB, Calif.	F-106A
	Crew of Capt. Tom Watson and Capt. Dave Pfeifer, 57th FIS, NAS Keflavik, Iceland	F-4E
1984	Capt. Scott H. Turner, 32d TFS, Camp New Amsterdam, the Netherlands	F-15C
	Maj. Ron M. Moore and Maj. Bill C. Dejager, 142d FIG (ANG), Portland IAP, Ore.	F-4C
	Maj. Lynn Robinson, 177th FIG (ANG), Atlantic City IAP, N. J.	F-106A
1986	Capt. John Reed (USAF Exchange Pilot), 425 Squadron, CFB Bagotville, Quebec, Canada	CF-18A
1988	Capt. Teddy Varwig, 49th TFW, Holloman AFB, N. M.	F-15A
1990	No competition	
1992	Capt. Jeffery Prichard, 18th Wing, Kadena AB, Japan	F-15C
1994	Capt. James Browne, 52d FW, Spangdahlem AB, Germany	F-15C

Gunsmoke

Gunsmoke is the USAF worldwide gunnery meet, run by Air Combat Command and held biennially at Nellis AFB, Nev. It tests the conventional air-to-surface capability of the combat air

forces, recognizing the best aircrews, maintenance teams, and munitions load teams. In 1993, bomber crews participated in Gunsmoke for the first time.

Gunsmoke Top Guns and Top Bomber Crews

Year	Individual	Aircraft	Unit, Base
1949	Lt. Calvin K. Ellis	F-80	4th FW, Langley AFB, Va.
	Lt. William Crawford	F-47	332d FW, Lockbourne Army Air Base, Ohio
1950	Lt. John W. Roberts	F-86	3525th FWS, Nellis AFB, Nev.
1951-53	No competition		
1954	Capt. Charles C. Carr	F-86	3595th TFW, Nellis AFB, Nev.
1955	Maj. Frederick C. Blesse	F-86	3596th CCTS, Nellis AFB, Nev.
1956	Capt. Asa Whitehead	F-86	3595th CCTW, Nellis AFB, Nev.
1958	Maj. Jack F. Brown	F-100	4520th CCTW, Nellis AFB, Nev.
1960	Capt. Aubrey C. Edinburgh	F-100	4520th CCTW, Nellis AFB, Nev.
1962	Capt. Charles E. Tofferi	F-104	479th TFW, George AFB, Calif.
1964-80	No competition		
1981	Lt. Col. Wayne Schultz	A-7	120th TFS (ANG), Buckley ANGB, Colo.
1983	Lt. Col. Roy Niesz	F-16	388th TFW, Hill AFB, Utah
1985	Capt. Mark Fredenburgh	F-16	50th TFW, Hahn AB, West Germany
1987	Maj. Danny Hamilton	F-16	419th TFW, Hill AFB, Utah
1989	Capt. Patrick Shay	F-16	944th TFG (AFRES), Luke AFB, Ariz.
1991	Lt. Col. Roger G. Disrud	A-10	442d TFW (AFRES), Richards-Gebaur AFB, Mo.
1993	Maj. Gregory Brewer	F-16	140th FW (ANG), Buckley ANGB, Colo.
	Top Bomber Crew: Capt. Dwayne Stich (commander), Capts. Barry Sebring, Steve Amato, David Conley, and Vernon Moore	B-52	93d BW, Castle AFB, Calif.
1995	Pacific Air Forces Team*		

*In 1995, Gunsmoke was redesigned, and no individual trophies were awarded.

Rodeo

Rodeo is US Transportation Command's biennial airlift and air refueling competition. Formerly an Air Mobility Command competition, Rodeo is still dominated by AMC teams. The week-long Rodeo '94 at McChord AFB, Wash., showcased the top USAF active-duty, Air National Guard, and Air Force Reserve aircraft and teams and those of allied nations. The next Rodeo is scheduled for June 1996. The trophy for the best overall wing is named after Gen. William G. Moore, Jr., the eighth commander in chief of Military Airlift Command, an AMC predecessor.

Moore Trophy Recipients

Year	Unit(s)
1962	1502d Air Transport Wing, Hickam AFB, Hawaii
1963	62d Air Transport Wing, McChord AFB, Wash.
1964	1608th Air Transport Wing, Charleston AFB, S. C.
1965-68	No competition
1969	21st Air Force (multiwing)
1970	21st Air Force (multiwing)
1971	22d Air Force (multiwing)
1972	21st Air Force (multiwing)
1973-78	No competition
1979	443d MAW, Altus AFB, Okla.
1980	317th TAW, Pope AFB, N. C.
1981	314th TAW, Little Rock AFB, Ark.
1982	Italian airlift wing
1983	314th TAW, Little Rock AFB, Ark.
1984	Italian airlift wing
1985	94th TAW (AFRES), Dobbins AFB, Ga.
1986	145th TAG (ANG), Charlotte, N. C.
1987	West German airlift wing
1988	No competition
1989	Australian airlift wing
1990	63d MAW, Norton AFB, Calif.
1991	No competition
1992	446th AW (AFRES Assoc.), McChord AFB, Wash.
1993	440th AW (AFRES), General Mitchell IAP, Wisc.
1994	19th ARW, Robins AFB, Ga.

The Gen. Thomas D. White USAF Space Trophy

The Gen. Thomas D. White USAF Space Trophy is named for the fourth Air Force Chief of Staff, a longtime champion of USAF's role in space. Sponsored by the National Geographic Society, the trophy is pre-

sented annually to Air Force individuals or organizations (civilian or military) who made the year's outstanding progress in the field of aerospace. There has been no award since General McPeak in 1993.

- 1961 **Capt. Virgil I. Grissom.** Mercury spacecraft *Liberty Bell 7* flight.
- 1962 **Maj. Robert M. White.** X-15 flight to 59.6 miles.
- 1963 **Maj. L. Gordon Cooper.** Twenty-two Earth orbits in Mercury spacecraft *Faith 7*.
- 1964 **Air Force Systems Command.** Reliable space-launch vehicles.
- 1965 **Lt. Col. Edward H. White II.** First US walk in space, Gemini 4.
- 1966 **Dr. Alexander H. Flax.** Direction of R&D programs.
- 1967 **Gen. John P. McConnell.** Promotion of use of aerospace vehicles.
- 1968 **Col. Frank Borman, Lt. Col. William A. Anders, Capt. James A. Lovell, Jr.** First manned moon orbit flight.
- 1969 **Neil A. Armstrong, Col. Edwin E. Aldrin, Jr., Col. Michael Collins.** Apollo 11 lunar landing.
- 1970 **Brig. Gen. Robert A. Duffy.** Advanced Ballistic Missile Reentry System program.
- 1971 **Lt. Gen. Samuel C. Phillips.** Space and missile R&D.
- 1972 **Hon. Robert C. Seamans, Jr.** Aeronautic and astronautic planning.
- 1973 **Lt. Col. Henry W. Hartsfield, Jr.** Skylabs 1, 2, 3, and 4 and parasol device for Skylab 1.
- 1974 **Col. William R. Pogue.** Third manned Skylab mission.
- 1975 **Maj. Gen. Thomas P. Stafford.** Apollo-Soyuz Test Project.
- 1976 **Gen. William J. Evans.** Development of space systems.
- 1977 **Fred W. Haise, Jr., Lt. Col. Charles G. Fullerton.** First test flight of space shuttle *Enterprise*.
- 1978 No award given.
- 1979 **Maj. Gen. John E. Kulpa, Jr.** Direction of Special Projects and Satellite Programs.
- 1980 **Gen. Lew Allen, Jr.** Operational military space support.
- 1981 **Col. Joe Henry Engle, USAF, Capt. Richard H. Truly, USN.** Second flight of orbiter *Columbia*.
- 1982 **Lt. Gen. Richard Charles Henry.** Military use of payload specialists on shuttle; established Air Force Space Command.
- 1983 **Gen. James V. Hartinger.** Strengthening national security through space operations.
- 1984 **Lt. Gen. Forrest S. McCartney.** Commander of Space Division, Air Force Systems Command.
- 1985 **Maj. Gen. Donald W. Henderson.** Commander of Air Force Space and Missile Test Organization.
- 1986 **Gen. Donald J. Kutyna.** Director of Space Systems and Command, Control, and Communications for the Deputy Chief of Staff.
- 1987 **Col. Victor Whitehead.** Restoring launch capacity after *Challenger* disaster and Titan 34D launch failures.
- 1988 **Dr. Robert R. Barthelemy.** X-30 hypersonic plane project.
- 1989 **Launch Systems Directorate, Space Systems Division.** Expendable launch boosters and satellite systems.
- 1990 **Lt. Gen. Donald L. Cromer, USAF (Ret.), Gen. John L. Piotrowski, USAF (Ret.).** Strengthening USAF space systems and forces.
- 1991 **Lt. Gen. Thomas S. Moorman, Jr.** Vice Commander of Air Force Space Command.
- 1992 **Maj. Gen. Nathan J. Lindsay, USAF (Ret.).** Director of the Office of Special Projects, Office of the Secretary of the Air Force, Los Angeles AFB, Calif.
- 1993 **Gen. Merrill A. McPeak.** Air Force Chief of Staff.