A Brief Chronology of Amateur Radio Satellites

Orbiting Satellites Carrying Amateur Radio (OSCAR) are series of small satellites designed and developed by radio amateurs to experience satellite tracking and establish two way space communication. The World Administrative Radio Conference (WARC) allocated frequencies for the Amateur Satellite Service, including 29 MHZ (10m), 145 MHz (2m), 435 MHz (70cm), 1270 MHz (24cm) and 2400 MHz (13cm). Transmitting low-powered signals, initially battery operated and offering short lives, the satellites have become increasingly sophisticated. More recently, they have served school science groups, provided emergency communications for disaster relief, acted as technology demonstrators and transmitted Earth imagery.

1961

OSCAR (OSCAR 1)

OSCAR was launched on 12 December, 1961 from Vandenberg, AFB aboard a Agena and was Inserted into a 431.00 x 245.30 Km orbit inclined 81.14 degrees. The satellite weighed 4.500 Kg. It was a project of Project OSCAR. The satellite re-entered the earth's atmosphere on 31 January, 1962.

1974

AMSAT-OSCAR 7 (AO- 7)

AMSAT-OSCAR 7 was launched on 15 November, 1974 from Vandenberg, AFB aboard a Delta 2310 and was inserted into a 1459.00 x 1440.00 Km orbit inclined 101.59 degrees. The satellite measured 36.0cm x 42.4cm octahedron, and weighed 28.800 Kg. It was a project of AMSAT-NA.

1983

AMSAT-OSCAR 10 (Phase 3B)

AMSAT-OSCAR 10 was launched on 16 June, 1983 from French Guiana aboard a Ariane 4 and was inserted into a 35465.00 x 3982.00 Km orbit inclined 27.46 degrees. The satellite measured 60 x 40 x 20cm, and weighed 90.000 Kg. It was a project of AMSAT-NA/AMSAT-DL.

1990

UoSAT-OSCAR 14 (UO-14)

UoSAT-OSCAR 14 was launched on 22 January, 1990 from French Guiana aboard a Ariane 4 and was inserted into a 795.00 x 779.00 Km orbit inclined 98.20 degrees. The satellite measured 35 x 35 x 65cm, and weighed 46.000 Kg. It was a project of University of Surrey.

1991

Radio Sputnik 12 (RS-12)

Radio Sputnik 12 was launched on 5 February, 1991 from Plesetsk MSC aboard a Cosmos C and was inserted into a 1006.00 x 961.00 Km orbit inclined 82.92 degrees. It was a project of Radio Sport Federation.

1993

AMRAD-OSCAR 27 (AO-27)

AMRAD-OSCAR 27 was launched on 26 September, 1993 from Kourou, French Guiana aboard a Ariane 4 and was inserted into a 800.00 x 789.00 Km orbit inclined 98.27 degrees. The satellite measured ~25cm cube, and weighed 11.800 Kg. It was a project of AMRAD/Interferometrics.

1996

Fuji-OSCAR 29 (JAS 2)

Fuji-OSCAR 29 was launched on 17 August, 1996 from Tanegashima Space Center aboard a H-II No. 4 and was inserted into a 1323.00 x 800.00 Km orbit inclined 98.54 degrees. The satellite measured 44 x 47 polyhedron , and weighed 50.000 Kg. It was a project of Japan Amateur Radio League.

1998

Gurwin OSCAR-32 (TechSat1b)

Gurwin OSCAR-32 was launched on 10 July, 1998 from Baikonur Cosmodrome aboard a Zenith and was inserted into a 816.00 x 814.00 Km orbit inclined 98.48 degrees. The satellite measured 44.5 x 44.5 x 44.5 cm cube, and weighed 60.000 Kg. It was a project of Technion Institute of Technology.

1998

ARISS (NA1SS / RSOISS)

The first amateur radio equipment was carried to the ISS on Space Shuttle Atlantis in September 2000 and installed by the Expedition 1 crew. The first amateur contacts were made by Commander William Shepherd in mid November 2000. ISS Orbit - 353.00 x 341.00 Km orbit inclined 51.64 degrees. It was a project of ARISS/AMSAT/ARRL.

2000

AMSAT-OSCAR 40 (Phase 3D)

AMSAT-OSCAR 40 was launched on 16 November, 2000 from Kourou, French Guiana aboard a Ariane 5 and was inserted into a 58665.00 x 1157.00 Km orbit inclined 7.24 degrees. The satellite measured 230 x 230 x 70 cm hexagon, and weighed 244.000 Kg. It was a project of AMSAT-DL/AMSAT-NA.

2002

Saudi-OSCAR 50 (SO-50)

Saudi-OSCAR 50 was launched on 20 December, 2002 from Baikonur Cosmodrome aboard a Dnepr and was inserted into a 713.00 x 603.00 Km orbit inclined 64.56 degrees. The satellite measured ~25cm cube, and weighed 10.000 Kg. It was a project of King Abdulaziz University for Science & Technology.

2004

AMSAT-OSCAR 51 (Echo)

AMSAT-OSCAR 51 was launched on 28 June, 2004 from Baikonur Cosmodrome aboard a Dnepr and was inserted into a 818.00 x 696.00 Km orbit inclined 99.97 degrees. The satellite measured ~25cm cube, and weighed 11.140 Kg. It was a project of AMSAT-NA.

2005

HAMSAT (VO-52)

VO-52 was launched on 5 May, 2005 from Sirharkota aboard a PSLV and was inserted into a 646.00 x 607.00 Km orbit inclined 97.24 degrees. The satellite measured 63 x 63 x 55 cuboid, and weighed 42.500 Kg. It was a project of AMSAT-INDIA.

2005

AMSAT-OSCAR 54 (SuitSat)

SuitSat is a payload that was installed in a discarded Russian Orlan EVA suit that was ejected from the International Space Station. It carried an amateur radio beacon that was activated in the two meter band. AMSAT-OSCAR 54 was launched on 8 September, 2005 from Tyuratam MSC aboard a Progress and was inserted into a 344.00 x 334.00 Km orbit inclined 51.64 degrees. It was a project of ARISS/AMSAT.

2009

Sumbandila Oscar 67 (SO-67)

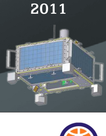
Sumbandila Oscar 67 was launched on 17 September, 2009 from Baikonur aboard a Soyuz-2-B/Fregat and was inserted into a 520.00 x 498.00 Km orbit inclined 97.30 degrees. The satellite weighed 81.000 Kg. It was a project of AMSAT-SA.

2009

Hope Oscar 68 (HO-68)

Hope Oscar 68 was launched on 15 December, 2009 from Taiyuan Satellite Launch Center of China aboard a CZ-4C (LM-4C) Rocket and was inserted into a 1200.00 x 1200.00 Km orbit inclined 100.50 degrees. The satellite measured 680mm*480mm (Envelope dimension), not include antennas, and weighed 60.000 Kg. It was a project of CAMSAT.

2011



ARISSat-1

ARISSat-1 was launched on 28 January, 2011 from Baikonur aboard a Progress and was inserted into a 355.00 x 350.00 Km orbit inclined 51.65 degrees. The satellite measured 55 x 55 x 40 cm, and weighed 30.000 Kg. It was a project of AMSAT and RSC Energia.

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