

COMSAT CORPORATION
d/b/a COMSAT MOBILE
COMMUNICATIONS

For authority to permit communications
via its land earth stations at Brewster,
Washington, Santa Paula, California,
Southbury, Connecticut and Clarksburg,
Maryland and Innarsat, Ltd. third
generation satellites for the provision of
mobile satellite services

File Nos.
SES-AMMD-19990108-00012
SES-AMMD-20000501-00719
SES-AMMD-19990108-00015
SES-AMMD-20000501-00695
SES-AMMD-19990108-00041
SES-AMMD-20000501-00720
SES-AMMD-19990108-00011
SES-AMMD-20000501-00721
SES-AMMD-19990108-00016
SES-AMMD-20000501-00722
SES-MOD-19990108-00051
SES-AMMD-20000501-00701
SES-MOD-19990108-00071
SES-AMMD-19990405-00425
SES-AMMD-20000501-00703
SES-MOD-19990108-00075
SES-AMMD-19990405-00426
SES-AMMD-20000501-00699
SES-MOD-19990108-00017
SES-AMMD-20000501-00711
SES-AMMD-19990108-00013
SES-AMMD-20000501-00723
SES-MOD-19990108-00048
SES-AMMD-19990405-00423
SES-AMMD-20000501-00718
SES-MOD-19990108-00055
SES-AMMD-20000501-00702
SES-MOD-19990108-00024
SES-AMMD-19990405-00428
SES-AMMD-20000501-00704
SES-MOD-19990108-00018
SES-AMMD-19990405-00424
SES-AMMD-20000501-00717
SES-MOD-19990108-00062
SES-AMMD-20000501-00712
SES-MOD-19990108-00020
SES-AMMD-19990405-00429
SES-AMMD-20000501-00716

) mobile earth terminals using
) Inmarsat Ltd. satellites

) COMSAT CORPORATION
) d/b/a COMSAT MOBILE
) COMMUNICATIONS

) File No. SES-LIC-20000609-00946

) Application for blanket authority to
) operate up to 1000 Inmarsat Mini-M
) mobile earth terminals using
) Inmarsat Ltd. satellites

) COMSAT CORPORATION
) d/b/a COMSAT MOBILE
) COMMUNICATIONS

) File No. SES-LIC-20000609-00947

) Application for blanket authority to
) operate up to 1000 Inmarsat-M
) mobile earth terminals using
) Inmarsat Ltd. satellites

) COMSAT CORPORATION
) d/b/a COMSAT MOBILE
) COMMUNICATIONS

) File No. SES-LIC-20000609-00948

) Application for blanket authority to
) operate up to 1000 Inmarsat-C
) mobile earth terminals using
) Inmarsat Ltd. satellites

) COMSAT CORPORATION
) d/b/a COMSAT MOBILE
) COMMUNICATIONS

) File No. SES-LIC-20000609-00949

) Application for blanket authority to
) operate up to 1000 Inmarsat-B
) mobile earth terminals using
) Inmarsat Ltd. Satellites

) MARINESAT COMMUNICATIONS
) NETWORK, INC. d/b/a
) STRATOS COMMUNICATIONS

) File No. SES-MSC-20000426-00861

) Application pursuant to Section 214
) of the Communications Act of 1934,
)

resale and facilities-based domestic)
and international services))

IDB MOBILE COMMUNICATIONS))
INC.) File No. ITC-214-19981214-00859

Application pursuant to Section 214)
of the Communications Act of 1934, as)
amended, to provide domestic)
aeronautical mobile satellite services)
via Inmarsat satellite system)

MEMORANDUM OPINION, ORDER AND AUTHORIZATION

Adopted: September 24, 2001

Released: October 9, 2001

By the Commission: Commissioner Abernathy issuing a separate statement.

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Appendix A: Description of Applications

Appendix B: Applications to Modify Existing Land Earth Stations

Stations

Appendix C: Applications Seeking Authority to Operate Mobile Earth Stations

Earth Stations

Appendix D: Application to Operate Land Earth Stations in Support of Wide Area Augmentation System (WAAS)

I. INTRODUCTION

1. By this order, we grant Comsat Corporation, Comsat Corporation d/b/a Comsat Mobile Communications, Marinesat Communications Network d/b/a Stratos, Stratos Mobile Networks, LLC, IDB Mobile Communications Inc,¹ Honeywell, Inc. (Honeywell), Deere & Company (Deere), and SITA Information Computing Canada (SITA) authority to operate a variety of mobile earth terminals (METs) to provide domestic and international Mobile Satellite Service (MSS)² via the privatized Inmarsat Ltd. (now d/b/a Inmarsat, plc) satellite system using L-band frequencies.³ We also modify the land earth station (LES)⁴ licenses of Comsat and Stratos to permit domestic

¹ We will refer to the two closely affiliated Comsat companies as "Comsat," and the three closely affiliated Stratos companies, including IDB Mobile Communications, Inc., as "Stratos." We also note that on July 31, 2000, the Commission authorized the transfer of control of Comsat Corporation and its subsidiaries to a wholly-owned subsidiary of Lockheed Martin Corporation. *Applications for Transfer of Control of Comsat Corporation and Its Subsidiaries, Licensees of Various Satellite, Earth Station Private Land Mobile Radio and Experimental Licenses, and Holders of International Section 214 Authorizations*, 15 FCC Rcd 22910 (2000). We further note that Stratos is indirectly controlled by NewTel Enterprises Limited, a Canadian corporation, which is controlled by BCE, Inc., a Canadian holding company. The Commission has found that the transfer of control of Stratos' Section 214 and Title III authorizations to NewTel is in the public interest. *See Stratos Mobile Networks (USA) LLC, et al.*, 13 FCC Rcd 14040 (1998).

² MSS is a radiocommunication service between mobile earth stations and one or more space stations providing voice, data and other services. MSS is used generically in this order to encompass service to mobile terminals on land vehicles (Land Mobile Satellite Service (LMSS)), aircraft (Aeronautical Mobile Satellite Service (AMSS)), and ships (Maritime Mobile Satellite Service (MMSS)).

³ The L-band encompasses frequencies from 1525-1544/1545-1559 MHz and 1626.5-1645.5/1646.5-1660.5 MHz. The frequencies 1525-1544 MHz and 1626.5-1645.5 MHz are referred to as the "lower L-band" and 1545-1559 MHz and 1646.5-1660.5 MHz as the "upper L-band." The band 1544-1545/1645.5-1646.5 MHz is limited to safety and distress communications in the MSS in accordance with Footnotes SS.356 and SS.365 to the Table of Frequency Allocations. 47C.F.R. § 2.106.

⁴ Land earth stations, also called "gateway" or "hub" earth stations support communications between a MET and the Inmarsat satellite system. In a typical transmission path, a signal from a MET travels up to the satellite and then down to the LES, where the MET signal is interconnected with the terrestrial facilities

- f. The LES shall automatically inhibit all transmissions to METs to which it is not transmitting a signalling channel or signalling within the communications channel;
- g. The LES shall be capable of transmitting channel-shut-off commands to the METs on signaling or communications channels;
- h. An LES with a requirement to handle distress and safety-related communications shall have the capability within the station to automatically preempt lower precedence traffic; and
- i. Each LES shall be capable of automatically turning off one or more of its associated channels.

120. IT IS FURTHER ORDERED that, in accordance with US Footnote 308, the operation of METs in the 1545-1549.5, 1558.5-1559 MHz, 1646.5-1651 MHz and 1660-1660 MHz ~~is on a secondary basis to U.S. AMSTFRS requirements of other U.S.-authorized MSS providers operating in the 1545-1559 and 1646.5-1660 MHz bands.~~

121. IT IS FURTHER ORDERED that the applications for Section 214 authorizations listed in Appendix C ARE GRANTED, provided that service shall only be offered to terminals for which appropriate Title III authorizations have been granted.

122. IT IS FURTHER ORDERED that the ~~Petition to Adopt Conditions to Authorization and Licenses~~ filed by the Department of Justice and the Federal Bureau of Investigation, on August 9, 2001, IS GRANTED, and that the authorizations and licenses related thereto which are granted by this Order are subject to compliance with provisions of the Agreement between Stratos on the one hand, and the Department of Justice and the Federal Bureau of Investigation on the other, attached hereto as Appendix E. Nothing in the Agreement is intended to limit any obligation imposed by Federal law or regulation including, but not limited to, 47 U.S.C. §§ 222(a) and (c)(1) and the Commission's implementing regulations.

123. IT IS FURTHER ORDERED that the petitions to deny filed by Motient, GlobalStar, and GE American Communications, Inc., and the partial opposition filed PanAmSat, ARE DENIED.

APPENDIX C

Applications seeking authority to operate mobile earth stations (METs) for the provision of mobile satellite services via INMARSAT Ltd.:

CALL SIGN FILE NUMBER APPLICANT NAME (Terminals)

E000156	SES-LIC-20000403-00534	HONEYWELL, INC. (500 SCS-1000, Mini Aero.)
E000180	SES-LIC-20000426-00630	MARINESAT COMMUNICATIONS NETWORK, INC. D/B/A STRATIOS COMMUNICATIONS (1000 INMARSAT M-4)
E000280	SES-LIC-20000609-00944	COMSAT CORPORATION / COMSAT MOBILE COMMUNICATIONS (Up to 1000 INMARSAT M-4)
E000282	SES-LIC-20000609-00946	COMSAT CORPORATION / COMSAT MOBILE COMMUNICATIONS (Up to 1000 INMARSAT Mini-M)
E000283	SES-LIC-20000609-00947	COMSAT CORPORATION / COMSAT MOBILE COMMUNICATIONS (Up to 1000 INMARSAT M)
E000284	SES-LIC-20000609-00948	COMSAT CORPORATION / COMSAT MOBILE COMMUNICATIONS (Up to 1000 INMARSAT C)
E000285	SES-LIC-20000609-00949	COMSAT CORPORATION / COMSAT MOBILE COMMUNICATIONS (Up to 1000 INMARSAT B)
E010011	SES-LIC-20010112-00051	DEERE & COMPANY (10,000 Rx-only Starfire™)
E010047	SES-LIC-20010221-00360	MARINESAT COMMUNICATIONS NETWORK, INC. D/B/A STRATIOS COMMUNICATIONS (1000 INMARSAT M)

APPENDIX C (cont'd)

CALL SIGN FILE NUMBER APPLICANT NAME (Terminals) SATELLITE

E010048 SES-LIC-20010221-00361 MARINESAT COMMUNICATIONS
NETWORK, INC. D/B/A STRATIOS
COMMUNICATIONS
(1000 INMARSAT Mini-M)

E010049 SES-LIC-20010221-00362 MARINESAT COMMUNICATIONS
NETWORK, INC. D/B/A STRATIOS
COMMUNICATIONS
(1000 INMARSAT B)

E010050 SES-LIC-20010221-00363 MARINESAT COMMUNICATIONS
NETWORK, INC. D/B/A STRATIOS
COMMUNICATIONS
(1000 INMARSAT C)

Applications pursuant to Section 214 of the Communications Act of 1934
seeking authority to provide mobile satellite services via INMARSAT Ltd.:

SES-MSC-20000209-01020 SITA INFORMATION NETWORKING
COMPUTING
(Resale service for AMSS)

SES-MSC-20000426-00861 MARINESAT COMMUNICATIONS
NETWORK, INC. D/B/A STRATIOS
COMMUNICATIONS
(INMARSAT M-4 service / LMSS)

SAT-ITC-20000605-00103 COMSAT CORPORATION
(INMARSAT M-4, M, Mini-M, B & C
Services / AMSS & LMSS)

SES-MSC-20010220-00349 MARINESAT COMMUNICATIONS
NETWORK, INC. D/B/A STRATIOS
COMMUNICATIONS
(INMARSAT M, Mini-M, B & C services /
LMSS)

ITC-214-19981214-00859 IDB MOBILE COMMUNICATIONS, INC.
(domestic AMSS)

[*21716] 124. IT IS FURTHER ORDERED that Comsat's motion to strike Motient petitions to deny application file numbers SES-LIC-20000609-00944, 20000609-00946, 20000609-00947, 20000609-00948 and 20000609-00949 IS DENIED.

Magalie Roman Salas

Secretary

CONCURREY: ABERNATHY

CONCUR:

[*21744] SEPARATE STATEMENT OF COMMISSIONER KATHLEEN ABERNATHY

In re: Applications for Authority to Operate Mobile Earth Terminals and Land Earth Stations via Inmarsat Satellites to Provide Domestic and International Mobile Satellite Service, File No. ITC-97-222, Memorandum Opinion, Order and Authorization (rel. DATE)

Today's decision represents another significant step in the International Bureau's effort to reduce its backlog. Indeed, with this single Order, the Bureau has granted more than 60 pending applications. Since taking office, I have stressed the need for the Commission to focus on quality and timely service, and the need [**113] to reduce any remaining backlogs. Although I am pleased with the Bureau's diligence and dedication in this effort, we must remain vigilant to ensure that the backlog dragon is slayed, buried, and never rises to plague our licensees again. I look forward to working with the Bureau staff, my fellow commissioners and the Chairman to ensure that the public receives the quality service it deserves.

APPENDIX:

APPENDIX A

DESCRIPTION OF APPLICATIONS

Applications to modify the existing Land earth stations (gateway stations) to change the points of communications from INMARSAT to INMARSAT Ltd.:

On January 8, 1999, Comsat Corporation/Comsat Mobile Communications (Comsat) filed applications to modify their licenses of land earth stations to reflect the transfer of the Inmarsat satellites to the new private company - Inmarsat Limited. Comsat's land earth stations are licensed to operate on the 6417.5-6454 MHz, 6454.4-6456.6 MHz, 3600-3629 MHz and 4192.5-4200 MHz feeder link frequencies and/or the L-band frequency bands 1525-1559 MHz, 1574.4-1576.6 MHz and 1626.5-1660.5 MHz. See applications listed in APPENDIX B.

On January 8, 1999, Stratos Mobile Networks (USA), LLC (Stratos) filed [**114] applications to modify their licenses of land earth stations to reflect the transfer of the Inmarsat satellites to the new private company - Inmarsat Limited. Stratos's land earth stations are licensed to operate on the 6417.5-6439 MHz, 6440-6454 MHz, 3600-3614 MHz, 3615-3629 MHz and 4192.5-4200 MHz feeder link frequencies and the L-band frequency bands 1525-1544 MHz, 1545-1559 MHz, 1626.5-1645.5 MHz, 1646.5-1655.5 and 1656.5-1660.5 MHz. See applications listed in APPENDIX B.

On September 24, 1999, Comsat Corporation d/b/a Comsat Mobile Communications filed application for authority to operate one 1.8-meter transmit-only land earth station at Santa Paula, California, to provide TT&C operations with the INMARSAT 3F3 satellite, using the 1626.5-1652.5 MHz frequency, application file no. SES-LIC-19990924-01627, Call Sign E990422.

On March 13, 2000, COMSAT GENERAL CORPORATION filed application for authority to modify its existing 2.4-meter land earth station at Sunset Beach, HI, to add INMARSAT Ltd.-2 and Ltd.-3 satellites in the Pacific Ocean Region as points of communications, application file no. SES-MOD-20000313-00409, Call Sign E970053.

Applications seeking authority to operate [**115] mobile earth stations (METs) for the provision of mobile satellite services via INMARSAT Ltd.:

Honeywell, Inc. filed an application seeking a blanket license authorizing the operation of up to 500 full duplex SCS-1000, single-channel mobile earth stations (METs), which will communicate with the Inmarsat satellites through land earth station facilities at the United States and foreign countries. Honeywell, Inc. proposes to operate its METs on the 1626.5-1646.5 MHz and 1525-1545 MHz frequencies. Honeywell, Inc. intends to market, sell, and install the SCS-1000 METs for use onboard aircraft to enable flight personnel or passengers to engage in non-safety related voice, data, and facsimile communications during flight. The SCS-1000 will be flown in domestic, international, and combinations of domestic and international flight scenarios. See applications listed in Appendix C.

Deere & Company filed an application to operate up to 10,000 receive-only Starfire TM mobile earth stations to receive communications from Inmarsat's IIF2 satellite at 98 W.L. through the land earth station at Laurentides, Canada, in the frequency of 1536.16 MHz to support Deere's GreenStar TM precision [**116] farming service. The GreenStar TM service assists farmers in comparing the crop yields from various fields to determine, among other things, the amount of fertilizer and seed appropriate for a particular field and crop. Deere's GreenStar TM system automatically records crop yield and moisture data as the farmer harvests the crop, and at the same time uses the Global Positioning System to locate the longitude and latitude of each location where data are collected. See applications listed in Appendix C.

Marinesat Communications Network, Inc. d/b/a Stratos Communications (Stratos) filed applications for authority to operate 1000 each Inmarsat-B, -M, Mini-M, M4 and C mobile earth stations for the provision of domestic land mobile satellite service. These METs will communicate with the Inmarsat Ltd. satellites in the East and West Atlantic Ocean Regions through its land earth station facility at Laurentides, Canada and a switch physically located in the United States. The Inmarsat METs will be used to provide voice, data and facsimile services, enabling customers to access PSTN and Internet services using the frequencies 1626.5-1646.5 MHz and 1525-1545 MHz. See applications listed [**117] in Appendix C.

Comsat filed separate applications for authority to operate up to 1000 each Inmarsat B, C, M, Mini-M, and M-4 mobile earth stations with Inmarsat Ltd. satellites in the East and West Atlantic and Pacific Ocean Regions through its land earth station facilities at Southbury, Connecticut and Santa Paula, California. The Inmarsat C terminals provide domestic land mobile satellite services, including half-duplex data messaging service. Inmarsat M terminals provide domestic land mobile satellite services, including full-duplex switched voice, facsimile and data services. Mini-M mobile earth stations will provide domestic land mobile satellite service, including full-duplex switched voice service. The Inmarsat B terminals will provide domestic land mobile satellite services including, full-duplex switched voice, facsimile and data services. Inmarsat M-4 mobile earth stations will provide domestic land mobile satellite service, including full-duplex switched voice and data services. The INMARSAT M, Mini-M, and M-4 terminals operate in the 1626.5-1660.5 MHz and 1525-1559 MHz frequency bands. The INMARSAT B and C terminals operate in the 1626.5-1646.5 MHz and 1525-1545 MHz [**118] frequency bands. For Maritime units only, services include priority routing of distress and safety related communications. See applications listed in Appendix C.

Applications pursuant to Section 214 of the Communications Act of 1934 seeking authority to provide mobile satellite services via INMARSAT Ltd.:

Marinesat Communications Network, Inc. d/b/a Stratos Communications (Stratos) filed an application, pursuant to Section 214 of the Communications Act of 1934, for authority to provide INMARSAT M-4 domestic land mobile satellite service, using Inmarsat-M4 mobile terminals. Stratos will provide this service using the Inmarsat Ltd. Satellite System's third generation satellites in the East and West Atlantic Ocean Regions through its land earth station facility at Staten Island, New York. Inmarsat-M4 services will allow U.S. customers to have access to high-speed Internet and other data services from laptop size mobile terminals. See applications listed in Appendix C.

Marinesat Communications Network, Inc. d/b/a Stratos Communications (Stratos) filed an application, pursuant to Section 214 of the Communications Act of 1934, for authority to provide INMARSAT B, M, Mini-M, [**119] and C domestic land mobile satellite service, using Inmarsat-B, -M, Mini-M, and -C mobile terminals. Stratos will provide these services using the Inmarsat Ltd. Satellite System's third generation satellites in the East and West Atlantic Ocean

Regions through its land earth station facility at Laurentides, Canada and a switch physically located in the United States. See applications listed in Appendix C.

Comsat filed an application, pursuant to Section 214 of the Communications Act of 1934, for authority to provide domestic land mobile and aeronautical mobile satellite services, using Inmarsat-M4, -B, -M, Mini-M, and -C, and aeronautical terminals. COMSAT will provide these services using the Inmarsat Ltd. Satellite System's second and third generation satellites in the Atlantic and Pacific Ocean Regions through its land earth station facilities at Southbury, Connecticut and Santa Paula, California. See applications listed in Appendix C.

SITA filed an application pursuant to Section 214 of the Communications Act of 1934, as amended, and Section 63.18(e)(2) and 63.18(e)(4) of the Commission's rules, for authority to operate as a facilities-based carrier and to resell international [**120] services on all U.S. international aeronautical routes, except to countries listed on the Commission's exclusion list. In addition, SITA requests authority to operate as a nondominant domestic common carrier, pursuant to Section 63.07 of the Commission's rules. See applications listed in Appendix C.

IDB Mobile Communications, Inc. filed an application pursuant to Section 214 of the Communications Act of 1934 and Section 63.18(e)(6) of the Commission's rules, for authority to operate as a facilities-based carrier for the provision of domestic aeronautical mobile satellite services via the INMARSAT satellite system. See applications listed in Appendix C.

Applications filed by COMSAT seeking authority to operate Land earth Stations for the provision of aeronautical mobile satellite services in support of Wide Area Augmentation System (WAAS) via INMARSAT Ltd.:

Comsat filed an application for authority under Section 753(c) of the international Maritime Satellite Act and Section 214 of the Communications Act of 1934, as amended, to establish channels of communication between land earth stations at Brewster, Washington, Santa Paula, California, Southbury, Connecticut and [**121] Clarksburg, Maryland and Inmarsat Third generation satellites in the Atlantic Ocean Region-West, Atlantic Ocean Region-West and Pacific Ocean Region in support of the Federal Aviation Administration's Wide Area Augmentation System. See application listed in Appendix D.

Comsat Corporation/Comsat Mobile Communications filed applications requesting authority to operate land earth stations in support of the Department of Defense's the Global Positioning System (GPS) wide area augmentation system (WAAS) program. The geographic coverage of the WAAS program includes the continental U.S., Canada and northern Mexico, and U.S. offshore continental coastal waters. The WAAS system has three functional segments: (1) the wide area reference segment, (2) the wide area master segment and (3) the geostationary communication segment. The wide area reference segment consists of differential ground stations that are linked to form an U.S. WAAS network. Signals from GPS satellites are received by users as well as the WAAS ground stations. These ground stations are precisely surveyed, allowing each to determine any error in the GPS signals being received at its geographical location. Each ground station [**122] in the network relays this data to a WAAS master facility where correction information are processed and integrated. A navigation message is prepared and uplinked to an INMARSAT satellite via COMSAT's WAAS land earth station. The message is then broadcast on the same frequency as GPS by the INMARSAT satellites to receivers on board aircraft flying within the broadcast coverage area of the WAAS. COMSAT proposes to operate WAAS LBS on the 6454.4-6456.6 MHz, 1574.4-1576.6 MHz and 3629.4-3631.6 MHz frequencies. Operations on these frequencies have been coordinated and cleared by NTIA. See applications listed in Appendix D.

APPENDIX B

Applications to modify the existing Land earth stations (gateway stations) to change the points of communications from INMARSAT to INMARSAT Ltd.:

CALL SIGN	FILE NUMBER	APPLICANT NAME
E890649	SES-AMD-19990108-00012	COMSAT CORPORATION/COMSAT
E970322	SES-AMD-19990108-00015	MOBILE COMMUNICATIONS COMSAT CORPORATION/COMSAT MOBILE COMMUNICATIONS