Satellite and Freq. (MHz)	Channel Number	Rate (bit/s)	GES N° Hex	GES N° Octal	Ground Earth Station GES / ID	Channel P_smc	Service Provider	Remarks
64.5°E IOR - INMARSAT 3F1 **ID 3**								
1 545.005	14 002	600	C1	301		$P_{smc\,2}$		P Channels - π/2 BPSK
1 545.050	14 020	600	C1	301				
1 545.060	14 024	600	C5	305				
1 545.065	14 026	600	C1	301				
1 545.075	14 030	600	C1	301	PERTH (Australia)			
1 545.080	14 032	600	C5	305			ARINC	
1 545.085	14 034	600	C1	301	XXI			
1 545.170	14 068	600	C1	301				
1 545.175	14 070	600	C1	301				
1 545.185	14 074	600	C5	305				
1 545.190	14 076	600	C5	305		$P_{smc\,1}$		
1 545.966	14 386	1200			Not identified			BPSK
1 546.062	14 425	10500	C5	305	PERTH (Australia)			P Channels - OQPSK
1 546.078	14 431	10500	C1	301			ARINC	
1 546.092	14 437	10500	C1	301	XXI			
1 546.108	14 443	10500	C5	305				
25°E EMEA - INMARSAT 4 AF4 **ID 6** AlphaSat I-XL								
1 545.115	14 046	600			FUCINO (Italy)	P_{smc}		Satellite Access Stations
1 545.120	14 048	1200	90	220			SITA	P Channels - π/2 BPSK
1 545.125	14 050	1200			XXF			
1 545.8875	14 355	1200			Not identified			BPSK
1 546.013	14 405	10500	90	220	FUCINO (Italy)			P Channels - OQPSK
1 546.027	14 411	10500	90	220	XXF			
15.4°W AOR-E INMARSAT 3F2 **ID 1**								
1 545.015	14 006	600	43	103		$P_{smc\,1}$		P Channels - π/2 BPSK
1 545.030	14 012	600	43	103				
1 545.035	14 014	1200	43	103				
1 545.040	14 016	600	43	103	BURUM (Netherlands)			
1 545.045	14 018	1200	44	104			SITA	
1 545.095	14 038	600	44	104	XXN			
1 545.180	14 072	600	43	103				
1 545.195	14 078	600	44	104		$P_{smc\,2}$		
1 545.9875	14 395	1200			Not identified			BPSK
1 546.0550	14 422	10500	44	104	BURUM (Netherlands)			P Channels - OQPSK
1 546.0700	14 428	10500	43	103	XXN		SITA	
1 546.0850	14 434	10500	44	104				
54°W AOR-W - INMARSAT 3F4 **ID0**								
1 545.020	14 008	600	05	05		$P_{smc\,1}$		P Channels - π/2 BPSK
1 545.025	14 010	600	05	05				
1 545.055	14 022	600	02	02				
1 545.070	14 028	600	02	02				
1 545.090	14 036	600	05	05	BURUM (Netherlands)			
1 545.100	14 040	600	05	05			SITA	
1 545.160	14 064	600	05	05	XXN			
1 545.165	14 066	600	05	05				
1 545.205	14 082	600	02	02		$P_{smc\,2}$		
1 545.215	14 086	600	02	02				
1 545.220	14 088	600	02	02				
1 545.9525	14 381	1200			Not identified			BPSK
1 545.9775	14 391	1200						BPSK
1 546.0620	14 425	10500	05	05	BURUM (Netherlands)			P Channels - OQPSK
1 546.0780	14 431	10500	02	02	XXN		SITA	
1 546.0920	14 437	10500	02	02				

ARINC: Aeronautical Radio, Incorporated
SITA: Société Internationale de Télécommunication Aéronautique

Notes:

- Existing GES at Perth, Eik, Santa Paula and Aussaguel have been decommissioned (June - July 2013).
- GES located at **PERTH**, Australia and **BURUM**, Netherlands providing classic-aero communications services
 using the I-3 satellite constellation.

- The GES identifier for classic services using the INMARSAT 3 are:

Pacific Oceanic Region (POR)	**PERTH**	GES ID	XXP
Atlantic Oceanic Region-East (AOR-E)	**BURUM**	GES ID	XXN
Atlantic Oceanic Region-West (AOR-W)	**BURUM**	GES ID	XXW
Indian Oceanic Region (IOR)	**PERTH**	GES ID	XXI

- Services on INMARSAT 3: Aero H+, Aero H, Aero I, Aero L, Aero C, Swift 64

- Inmarsat is also operating Ground Stations that support both Classic Aero and SwiftBroadband services using
 the newer I-4 satellite constellation through GESs located in **FUCINO**, Italy and **PAUMALU**, Hawaii.
The GES identifiers for these services are:

Europe Middle East Africa (EMEA)	**FUCINO**	GES ID	XXF
Americas	**PAUMALU**	GES ID	XXH
Asia Pacific	**PAUMALU**	GES ID	XXA

- Services on INMARSAT 4 - ALPHASAT: Aero H+, SwiftBroadBand (SBB)

- The SwiftBroadband (SBB) service is certified for Safety-of-Flight Services over the SBB media. Essentially this is
ACARS FANS and AOC applications over the SBB media. The GESs at Burum, Netherlands and Paumalu,
Hawaii will operate this service.

- INMARSAT 4: Satellite Access Stations (SAS) BURUM (Netherlands), FUCINO (Italy) and
PAUMALU (Hawaii USA)

- Channels shall be allocated throughout the bands in increments of 2.5 kHz, for the to- and from-aircraft transmission
path.
- Channel Number: **n = Freq - 1510 / 0.0025** MHz or Frequency: **F (n) = 1 510 + n * 0.0025** MHz
with **14000 < n < 17999**
- Channel spacing dependent on data rates:
600/1200 bps = 2.5 kHz - 10.5 kbps = 10 kHz - 21 kbp = 17.5 kHz

- *P Channel*. Packet mode time division multiplex (TDM) channel transmitted continuously from the aeronautical
ground earth station (GES) in the to-aircraft direction to carry signalling and user data. A *P channel* being
used for system management functions is designated P_{smc}, while a *P channel* being used for other functions is
designated by P_d. The functional designations P_{smc} and P_d do not necessarily apply to separate physical channels.

- *R channel*. Random access (slotted Aloha) channel, used in the from-aircraft direction to carry signalling and user data.
An R channel being used for system management functions is designated Rsmc, while an R channel being used for
other functions is designated Rd. The functional designations Rsmc and Rd do not necessarily apply to separate
physical channels.

- *T channel*. Reservation time division multiple access (TDMA) channel, used in the from-aircraft direction only.
The receiving GES reserves time slots for transmissions requested by aircraft earth stations (AESs) according to
message length. The sending AES transmits the message in the reserved time slots according to priority.

- *C channel*. Circuit-mode single channel per carrier (SCPC) channel, used in both to-aircraft and from-aircraft
directions. This channel is time division multiplexed to provide a primary channel for voice or data traffic and a
sub-band channel for signalling, supervision and data messages. The use of the channel is controlled
by assignment and release signalling at the start and end of each transaction.