



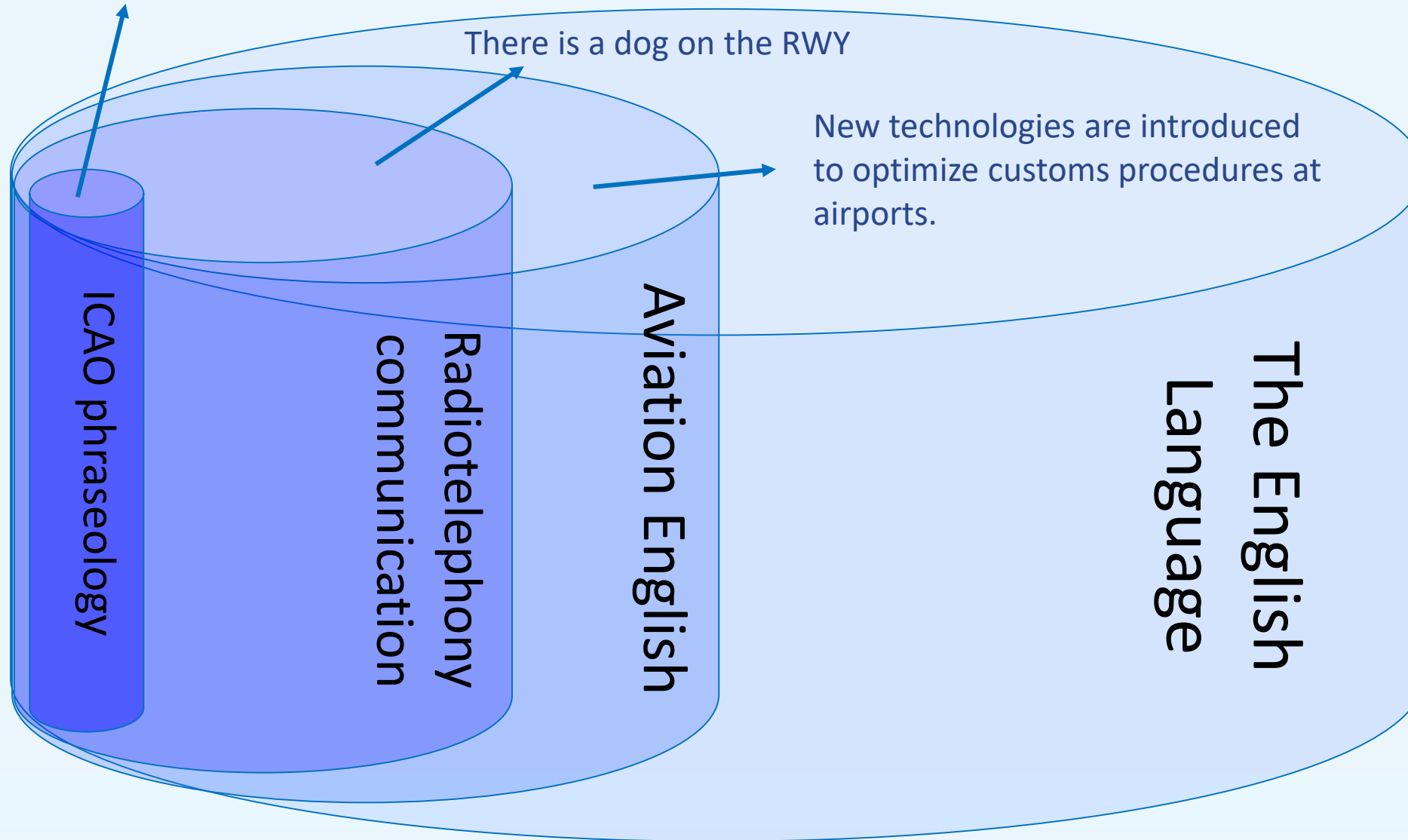
Teaching Phraseology: **How to reflect the Realia** **of Communication** **in Radiotelephony**



Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony

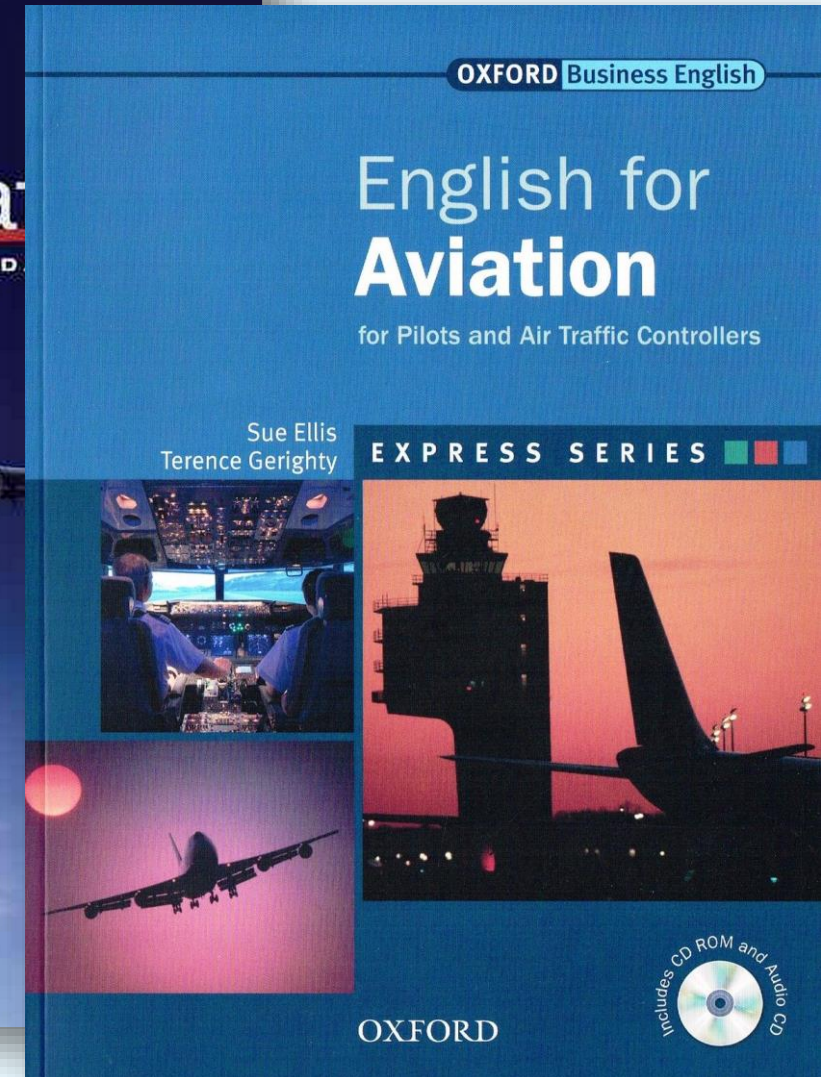
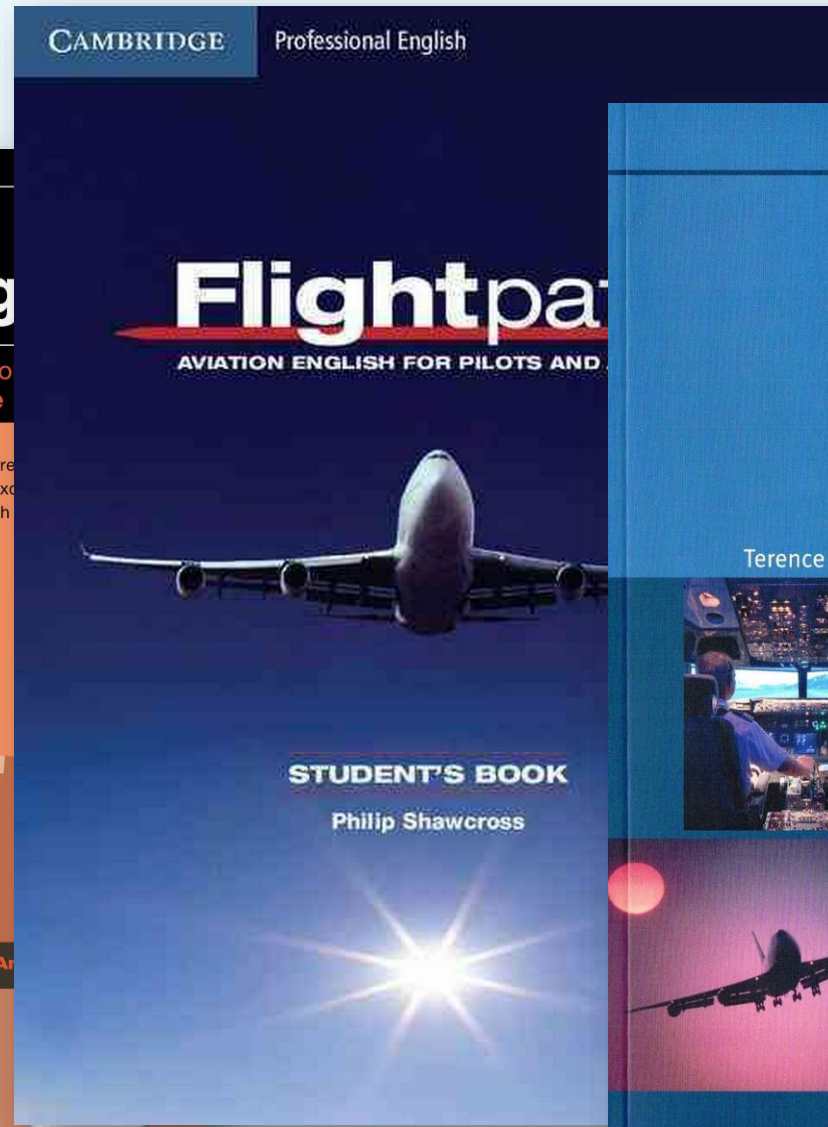


Cleared ILS approach RWY 14





Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony





Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony





Radiotelephony Communication Training

Simulator Flight





Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony



Callsign	ABW 303 Heavy
Aircraft type	Boeing 747-8F
Departure airport	Frankfurt (EDDF)
Destination airport	Chicago (KORD)
Destination alternate	Indianapolis (KIND)
Present position	
RWY for departure	RWY 25C
SID	SOBRA4G
STAR	PAITN4
ETD	18.20
HLA entry point	
HLA exit point	
Requested M+FL	

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OPERATIONAL FLIGHT PLAN 10
DATE:01APR2015 TIME:16:03 UTC

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FLT NBR ABW 303 01APR REGN VOBLR RT EDDF/FRA KORD/ORD
CAPTAIN .. .. . B747-8F ELEV 154 FT 672 FT
F/O .. .. . SPEED VRBL ETD 1820/1840 ETA 0333/0348
AVE W/C M024 ISA DEV P0 AVG FF 10225 COST INDEX 46

-----
CORRECTION ALL WEIGHTS IN KGS ACTUAL
FUEL TIME FUEL TIME DOW 193225 PYLD 95603 .. .. .
TRIP FUEL 90903 08.53 .. .. . MZFW 329761 EZFW 288828 .. .. .
RES 3636 00.21 .. .. . MTOW 447695 ETOW 394095 .. .. .
ALT. KIND 5728 00.35 .. .. . MLDW 346090 ELDW 303192 .. .. .
HOLD-ALT 5000 00.30 .. .. . BLOCK FUEL .. .. .
TAXI 1000 00.20 .. .. . T/O FUEL 105267 .. .. .
MIN.FUEL 106267 10.39 .. .. . L/G FUEL 14364 .. .. .
EXTRA 0 00.00 .. .. . REM FUEL 13614 .. .. .
RAMP FUEL 106267 10.39 .. .. . ZFW CORR PS2000
REASON .. .. . RAMP PS 576 /MS2000 RAMP MS 474
G/C DISTANCE 3766 NM ONE FL BELOW
SCTR ROUTE DIST. 3989 NM TRIP PS 1655 / TIME 09.01
AIR DISTANCE 4225 NM TANKERING SECTOR

-----
ALTERNATES FUEL TIME FL DIST MORA ROUTE
TKFAL .. .. .

AL1 IND/KIND 728 0035 210 0170 46 DCT CGT DCT BVT V399
JELLS DCT
AL2 DTW/KDTW 6669 0040 250 0230 46 ELX DCT CRL DCT
P941 P0006
AL3 CVG/KCVG 7473 0045 290 0261 46 DCT CGT DCT BVT J89
P1745 P0011 MACES DCT VHP SHB3

-----
FLIGHT PLAN ROUTE DEFRT
ED F/25C 1280 SOBRA4G SOBRA Y180 NISIV UY180 DIK UN857 TOLVU/F290
UN857 GIMER UT300 PDUK/F300 UL613 DIPER/F320 UL613 SANDY UL15 BIG
UL9 STU UN546 BAKUR/F320 DCT VENER/F320 DCT 56N020W 57N030W 58N040W
58N050W/F340 DCT AVUTI/F340 N488B YDP DCT TEALS DCT VANSI DCT SSM
PAITN4 KORD/10L

-----
ATC CLEARANCE: .. .. .

.. .. .

START UP ENG .. .. . OFF BLOCK .. .. . AIRBORNE .. .. .

ALTIMETER READING FOR RVSM OPERATIONS

TIME .. .. / .. .. / .. .. / .. .. / .. .. / .. .. / .. .. / .. .. / .. .. / .. ..

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Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony



Callsign	ABW 303 Heavy
Aircraft type	Boeing 747-8F
Departure airport	Frankfurt (EDDF)
Destination airport	Chicago (KORD)
Destination alternate	Indianapolis (KIND)
Present position	
RWY for departure	RWY 25C
SID	SOBRA4G
STAR	PAITN4
ETD	18.20
HLA entry point	Vener
HLA exit point	Avuti
Requested M+FL	M 0.84; FL320

CPT/114.35	1	.....	320	UL9	283	9	488	.840	88.5
N51 29.5 W001 13.2	0109	.....		32	281	3537	414	M03	31/084
KENET	2	.....	320	UL9	287	10	488	.840	88.2
N51 31.2 W001 27.3	0110	.....		32	285	3528	412	M03	31/084
GAVGO	8	.....	320	UL9	284	59	488	.840	88.0
N51 33.8 W001 42.6	0112	.....		49	283	3518	414	M02	31/082
DIKAS	10	.....	320	UL9	284	67	488	.840	86.4
N51 46.6 W003 15.6	0120	.....		49	282	3459	417	M02	31/078
STU/113.1	4	.....	320	UN546	305	28	490	.840	84.7
N51 59.7 W005 02.4	0130	.....	EISN	37	302	3392	415	M02	30/075
BAKUR	51	.....	320	DCT	299	360	488	.840	84.0
N52 14.5 W005 40.8	0134	.....	EGGX	50	296	3364	421	M02	28/068
VENER	26	.....	320	DCT	307	193	488	.840	74.9
N54 30.0 W015 00.0	0225	.....		20	300	3004	443	M02	26/051
56N020W	44	.....	320	DCT	295	337	490	.840	70.3
N56 00.0 W020 00.0	0251	.....	CZQX	20	284	2811	466	M00	20/035
57N030W	40	.....	320	DCT	300	328	488	.840	62.8
N57 00.0 W030 00.0	0335	.....		20	285	2474	489	M03	18/045
58N040W	38	.....	320	DCT	294	318	490	.840	56.0
N58 00.0 W040 00.0	0415	.....		20	274	2146	500	M00	16/058
58N050W	32	.....	340	DCT	289	258	494	.840	49.5
N58 00.0 W050 00.0	0453	.....		20	266	1828	491	P07	17/032
AVUTI	16	.....	340	N488B	271	133	496	.840	44.2
N57 28.0 W058 00.0	0525	.....	CZQX	36	247	1570	489	P09	17/023
YDP/247.0	23	.....	340	DCT	279	186	496	.838	41.5
N56 32.0 W061 41.5	0541	.....	CZUL	48	256	1437	493	P10	24/010
TEALS	49	.....	340	DCT	258	406	494	.838	37.8
N55 38.9 W067 00.0	0604	.....		50	236	1251	491	P08	32/039



Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony



No	STATION	FREQUENCY	FUNCTION	PILOT'S WORDS	CONTROLLER'S INFORMATION TO COPY
1	ATIS		ATIS (departure)	----- (monitor the frequency)	
2	Frankfurt Delivery		ATC clearance	ACFT location, Request ATC clearance to KORD information (A)	
			start-up	Request start-up	
3	Frankfurt Apron		push-back	ACFT location, request push-back	
			taxi		
4	Frankfurt Ground		taxi		

12-20

Air Traffic Management (PANS-ATM)

12.3.4 Phraseologies for use on and in the vicinity of the aerodrome

Circumstances	Phraseologies
12.3.4.1 IDENTIFICATION OF AIRCRAFT	SHOW LANDING LIGHTS.
12.3.4.2 ACKNOWLEDGEMENT BY VISUAL MEANS	a) ACKNOWLEDGE BY MOVING AILERONS (or RUDDER); b) ACKNOWLEDGE BY ROCKING WINGS; c) ACKNOWLEDGE BY FLASHING LANDING LIGHTS.
12.3.4.3 STARTING PROCEDURES	
... to request permission to start engines	*a) [aircraft location] REQUEST START UP; *b) [aircraft location] REQUEST START UP, INFORMATION (ATIS identification);
... ATC replies	c) START UP APPROVED; d) START UP AT (time); e) EXPECT START UP AT (time); f) START UP AT OWN DISCRETION; g) EXPECT DEPARTURE (time) START UP AT OWN DISCRETION. * Denotes pilot transmission.
12.3.4.4 PUSHBACK PROCEDURES	
Note.— When local procedures so prescribe, authorization for pushback should be obtained from the control tower. ... aircraft/ATC	*a) [aircraft location] REQUEST PUSHBACK; b) PUSHBACK APPROVED; c) STAND BY; d) PUSHBACK AT OWN DISCRETION; e) EXPECT (number) MINUTES DELAY DUE (reason). * Denotes pilot transmission.



Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony

No	STATION	FREQUENCY	FUNCTION	PILOT'S WORDS	CONTROLLER'S INFORMATION TO COPY
1	ATIS		ATIS (departure)	----- (monitor the frequency)	
2	Frankfurt Delivery		ATC clearance	ACFT location, request ATC clearance to KORD, information (A)	
			start-up	Request start-up	
3	Frankfurt Apron		push-back	ACFT location, request push-back	
			taxi	Request taxi	
4	Frankfurt Ground		taxi	Holding short of TWY/RWY... on TWY... / Holding point TWY/RWY... on TWY... *Request cross RWY...	

Chapter 12. Phraseologies

12-21

Circumstances	Phraseologies
12.3.4.5 TOWING PROCEDURES	†a) REQUEST TOW [company name] (aircraft type) FROM (location) TO (location);
... ATC response	b) TOW APPROVED VIA (specific routing to be followed);
	c) HOLD POSITION;
	d) STAND BY.
	† Denotes transmission from aircraft/tow vehicle combination.
12.3.4.6 TO REQUEST TIME CHECK AND/OR AERODROME DATA FOR DEPARTURE	*a) REQUEST TIME CHECK;
... when no ATIS broadcast is available	b) TIME (time);
	*c) REQUEST DEPARTURE INFORMATION;
	d) RUNWAY (number), WIND (direction and speed) (units) QNH (or QFE) (number) [(units)] TEMPERATURE [MINUS] (number), [VISIBILITY (distance) (units) (or RUNWAY VISUAL RANGE (or RVR) (distance) (units))] [TIME (time)].
	Note.—If multiple visibility and RVR observations are available, those that represent the roll-out/stop end zone should be used for take-off.
	* Denotes pilot transmission.
12.3.4.7 TAXI PROCEDURES	
... for departure	*a) [aircraft type] [wake turbulence category if "heavy"] [aircraft location] REQUEST TAXI [intentions];
	*b) [aircraft type] [wake turbulence category if "heavy"] [aircraft location] (flight rules) TO (aerodrome of destination) REQUEST TAXI [intentions];
	c) TAXI TO HOLDING POINT [number] [RUNWAY (number)] [HOLD SHORT OF RUNWAY (number) (or CROSS RUNWAY (number))] [TIME (time)];
... where detailed taxi instructions are required	*d) [aircraft type] [wake turbulence category if "heavy"] REQUEST DETAILED TAXI INSTRUCTIONS;



Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony



No	STATION	FREQUENCY	FUNCTION	PILOT'S WORDS	CONTROLLER'S INFORMATION TO COPY
8	Shanwick Oceanic		oceanic clearance		
9	Shanwick Radio		secal check & position reports		
	Gander Radio				

meet the MEL requirements for RVSM or NAT HLA Approval on the flight, then the pilot must advise ATC at initial contact when requesting Oceanic Clearance.

5.1.7 After obtaining and reading back the clearance, the pilot should monitor the forward estimate for oceanic entry, and if this changes by **3 minutes or more**, unless providing position reports via ADS-C, the pilot must pass a revised estimate to ATC. As planned longitudinal spacing by these OACs is based solely on the estimated times over the oceanic entry fix or boundary, failure to adhere to this ETA amendment procedure may jeopardise planned separation between aircraft, thus resulting in a subsequent re-clearance to a less economical track/flight level for the complete crossing. Any such failure may also penalise following aircraft.

5.1.8 If any of the route, flight level or Mach Number in the clearance differs from that flight planned, requested or previously cleared, attention may be drawn to such changes when the clearance is delivered (whether by voice or by data link). Pilots should pay particular attention when the issued clearance differs from the Flight Plan. *(N.B. a significant proportion of navigation errors investigated in the NAT involve an aircraft which has followed its Flight Plan rather than its differing clearance).*

5.1.9 Furthermore it must be recognised that if the entry point of the oceanic route on which the flight is cleared differs from that originally requested and/or the oceanic flight level differs from the current flight level, **the pilot is responsible for requesting and obtaining the necessary domestic re-clearance** to ensure that the flight is in compliance with its Oceanic Clearance when entering oceanic airspace.

5.1.10 If pilots have not received their Oceanic Clearance prior to reaching the Shanwick OCA boundary, they must contact Domestic ATC and request instructions to enable them to remain clear of Oceanic Airspace whilst awaiting such Clearance. This is not the case for other NAT OCAs into any of which flights may enter whilst pilots are awaiting receipt of a delayed Oceanic Clearance. Pilots should always endeavour to obtain Oceanic Clearance prior to entering these other NAT OCAs; however if any difficulty is encountered the pilot should not hold while awaiting Clearance unless so directed by ATC. In such circumstances, pending receipt of the Oceanic Clearance, the aircraft should continue to maintain the flight level cleared by the current control authority.

5.1.11 Unless otherwise stated the Oceanic Clearance issued to each aircraft is at a specified flight level and cruise Mach Number (Exceptions are discussed at section 5.7 below). Subsequent enroute changes to Flight level or Mach Number should not be made without prior ATC clearance, except in an urgency situation. *(e.g. encountering unanticipated severe turbulence).*

5.1.12 An example of a pilot voice request for Oceanic Clearance is as follows:

"ACA 865 request Oceanic Clearance. Estimating PIKIL at 1131. Request Mach decimal eight zero, Flight Level three five zero, able Flight Level three six zero, second choice Track Charlie".

5.1.13 If the request also includes a change to the original flight plan, affecting the oceanic segment, then it should be according to the following example:

"BAW 123 request Oceanic Clearance. Estimating RESNO at 1147. Request Mach decimal eight zero, Flight Level three four zero. Now requesting Track Charlie, able Flight Level three six zero, second choice Track Delta".

5.2 CONTENTS OF CLEARANCES

5.2.1 An abbreviated clearance is issued by Air Traffic Services when clearing an aircraft to fly along the whole length of an Organised Track. When an abbreviated clearance is issued it includes:

- a) clearance Limit, which will normally be destination airfield;



Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony



No	STATION	FREQUENCY	FUNCTION	PILOT'S WORDS	CONTROLLER'S INFORMATION TO COPY
8	Shanwick Oceanic		oceanic clearance	Request Oceanic Clearance, estimating Vener at 21.05, request Mach decimal 84, FL 320, able FL 340	
9	Shanwick Radio		secal check & position reports		
	Gander Radio				

GOXUL 5 1943 320 UL9 283 33 486 .840 89.5
N51 21.5 W000 10.6 0103 1943 31 282 3577 409 M03 31/088

LINDY 0 1948 320 UL9 282 3 488 .840 88.7
N51 28.2 W001 02.9 0108 1948 29 281 3544 412 M03 31/085

NORRY 1 1948 320 UL9 282 4 488 .840 88.6
N51 28.8 W001 07.4 0108 1948 29 281 3541 412 M03 31/084

CPT/114.35 1 1949 320 UL9 283 9 488 .840 88.5
N51 29.5 W001 13.2 0109 1949 32 281 3537 414 M03 31/084

KENET 2 1950 320 UL9 287 10 488 .840 88.2
N51 31.2 W001 27.3 0110 1950 32 285 3528 412 M03 31/084

GAVGO 8 1952 320 UL9 284 59 488 .840 88.0
N51 33.8 W001 42.6 0112 1952 49 283 3518 414 M02 31/082

DIKAS 10 2000 320 UL9 284 67 488 .840 86.4
N51 46.6 W003 15.6 0120 2000 49 282 3459 417 M02 31/078

STU/113.1 4 2010 320 UN546 305 28 490 .840 84.7
N51 59.7 W005 02.4 0130 2010 EISN 37 302 3392 415 M02 30/075

BAKUR 51 2014 320 DCT 299 360 488 .840 84.0
N52 14.5 W005 40.8 0134 2014 EGGX 50 296 3364 421 M02 28/068

VENER 2 2105 320 DCT 307 193 488 .840 74.9
N54 30.0 W015 00.0 0225 2105 20 300 3004 443 M02 26/051

56N020W 44 2131 320 DCT 295 337 490 .840 70.3
N56 00.0 W020 00.0 0251 2131 CZQX 20 284 2811 466 M00 20/035

57N030W 40 2215 320 DCT 300 328 488 .840 62.8
N57 00.0 W030 00.0 0335 2215 20 285 2474 489 M03 18/045

58N040W 38 2255 320 DCT 294 318 490 .840 56.0
N58 00.0 W040 00.0 0415 2255 20 274 2146 500 M00 16/058

58N050W 32 2333 340 DCT 289 258 494 .840 49.5
N58 00.0 W050 00.0 0453 2333 20 266 1828 491 P07 17/032

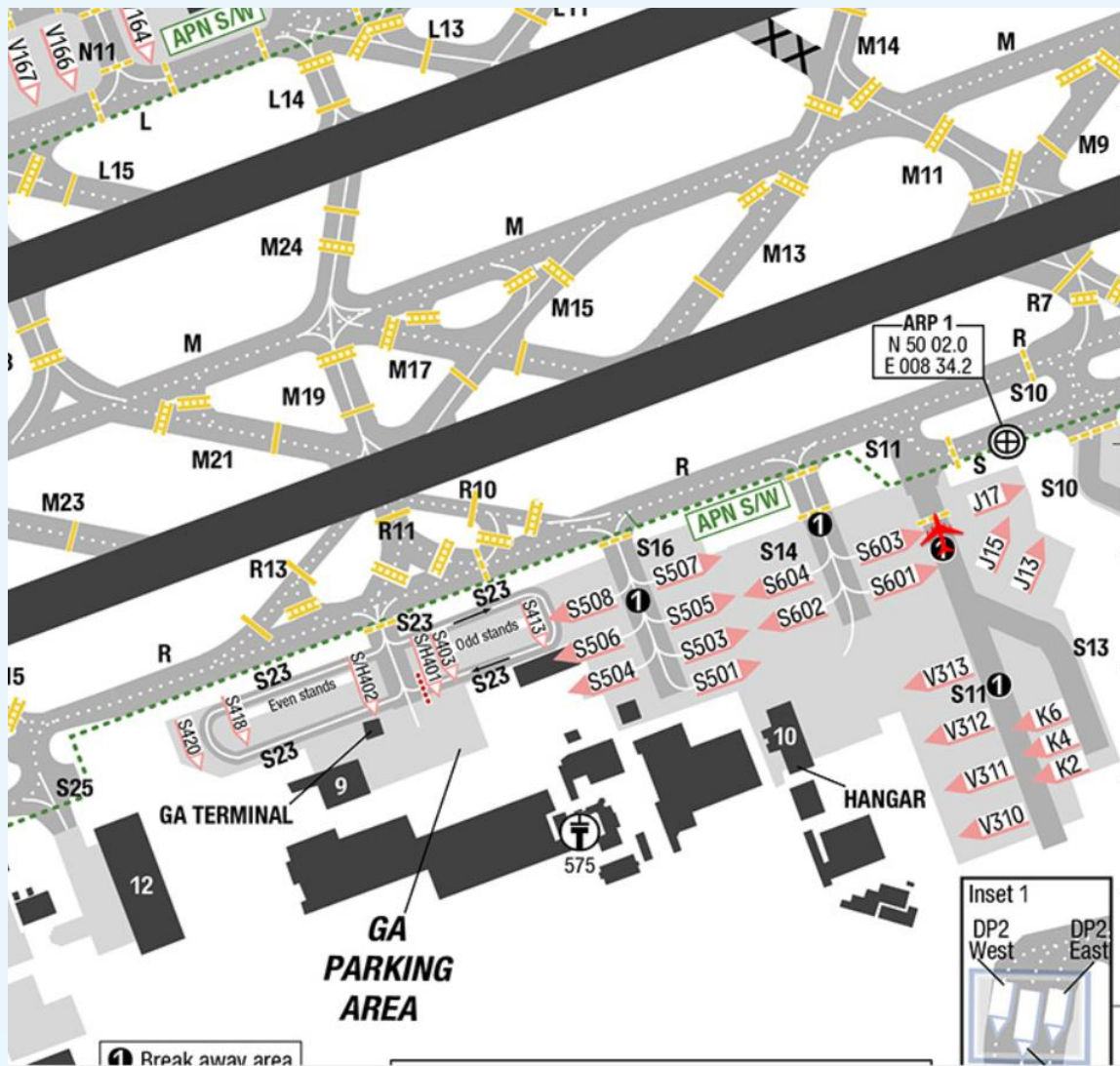
AVUTI 16 0005 340 N488B 271 133 496 .840 44.2
N57 28.0 W058 00.0 0525 0005 CZQX 36 247 1570 489 P09 17/023

YDP/247.0 23 0021 340 DCT 279 186 496 .838 41.5
N56 32.0 W061 41.5 0541 0021 CZUL 48 256 1437 493 P10 24/010

TEALS 49 0044 340 DCT 258 406 494 .838 37.8
N55 38.9 W067 00.0 0604 0044 50 236 1251 491 P08 32/039



Teaching Phraseology: How to reflect the Realia of Communication in Radiotelephony



PILOT	FRANKFURT APRON, ABW303 HEAVY, STAND V313, REQUEST PUSH-BACK
ATC	ABW303 FRANKFURT APRON, PUSH-BACK APPROVED (*TO BREAK AWAY AREA)
PILOT	PUSH-BACK APPROVED (TO BREAK AWAY AREA), ABW303
PILOT	ABW303, REQUEST TAXI
ATC	ABW303, TAXI VIA TWY S11, HOLD SHORT OF TWY S
PILOT	TAXI VIA TWY S11, HOLD SHORT OF TWY S, ABW303
Non-routine 1	LEFT FMS FAILURE
PILOT	FRANKFURT APRON, ABW303
ATC	ABW 303, FRANKFURT APRON
PILOT	ABW303, UNABLE TO PROCEED FURTHER ON THE ROUTE DUE TO FLIGHT MANAGEMENT SYSTEM FAILURE. THIS DOESN'T ALLOW US TO CROSS MNPS AIRSPACE. REQUEST RETURN TO STAND TO SORT OUT THE PROBLEM. (*REQUEST RETURN TO STAND DUE TECHNICAL PROBLEM)
ATC	ABW303, CONFIRM YOU ARE UNABLE TO CONTINUE WITH YOUR FLIGHT
PILOT	AFFIRM, ABW 303
ATC	ABW 303, WHAT IS YOUR POSITION?
PILOT	HOLDING SHORT AT TWY S, ABW303
ATC	ABW 303, STAND BY FOR A PUSH-BACK TUG TO TOW YOU BACK TO STAND
PILOT	STANDING BY, PARKING STAND V313, ABW303





THANK YOU FOR YOUR ATTENTION!

