Minutes of combined TF1M/19 and TF3M/16 for "The Project for Capacity Development in Air Traffic Services" in Tajikistan Dushanbe, 12 June 2018

1. The TF1M/19 and TF3M/16 for "The Project for Capacity Development in Air Traffic Services" (hereinafter "the Project") was held at 10:00-13:00 on 12 June 2018 in the Safety Department Room.

2. Project Manager organized this joint meeting, totally 10 participants of Mr. Shambiev (DDG), Mr. Rajabov (TF1 Leader), Mr. Khusenov (TF1 Sub-leader), Mr. Makhamadaminshoev (TF3 Leader), Mr. Khumorov (TF3 Sub-Leader), Mr. Akbar (TF1/3), Mr. Sergay(TF1), Mr. Ulugbeck and PC attended.

3. The purpose of this meeting was making management decisions for on-going TF1 and 3 activities.

4. Agenda:

1) 1-4 MVA Map/Chart creation
Meeting discussed technical things and set the deadline on each task as a table below.
This table is based on technical discussions in 4 to 11 June by TF1 and 3, then concluded MM on TF1M/18 in 8th June 2018.

	Items	Discussion and conclusion
1	Required MVA Chart/Map	The meeting decided to make the MVA Chart/Map for the UTDD approach area and ACC area.
2	MVA Chart/Map Cover range	Since TAN is using WAM+SSR multi sensors environment, meeting agreed that the MVA Chart /Map coverage will be 60km from UTDD RWY center, same as Project procured WGS-84 1/200,000 Map by FAZO. (It is not equal as SSR coverage area from the center of radar site.) For the ACC area, Joint team study JEPPSEN chart and decide technical specification by 31 Aug.
3	Existing Caution Line	TF1/3 decided to ignore the existing caution lines in Valzob area (FL180-190), because it is old and nobody verified. Working Team will reconsider this caution lines in newly developing MVA Chart/Map.
4	Technical requirements	In TF1M/18, Mr. Payrav promised to consult ATC Expert about segmentations, clearance and other technical issues, but not completed yet. He will discuss TF3 and send e-mail to the Expert by 15 June.
5	Clearance in approach area	ATC-1 Expert advised that it is better to use 2,000ft even approach area in "MVA Map Dev". PM and TF1/3 found that there is deferential of ICAO Annex-4, Doc8168 and Doc8697. Meeting decided to assign the investigation of technical specification.
6	Type of Outcomes	The meeting decided three outcomes as below. 1) MVA Chart layer in MASTER display and Radar Simulator, 2) MVA Map in paper.
7	Approval, AIP and others	The meeting confirmed MVA Chart/Map will be required CAA's approval. After completed draft, TAN will send a letter to CAA for obtaining authorization same as WGS-84.
8	User trainings and O/M change	Meting confirmed that Operation Manual change and user training are required. WG will investigate the higher document change by CAA will be required or not.
9	Consider the error of surveillance	Meeting agreed that it is no need consideration for precision on Radar. PC explained that altitude information is obtaining mode-C transponder or ADS-B broadcast from aircraft in WAM+SSR environment. In this regard, it is no need to consider the Z-axis accuracy, also possible to disregard the X/Y-plane accuracy because of the multi-sensor system's performance.
10	Annual inspection	Although ATC-1 Expert suggested that only newly constructed obstacles should be inspected annually, the meeting concluded that it is needs to analyze ICAO recommendations, how and who conduct annual inspection for newly constructed obstacles annually.
11.	Responsibility and Deadline	Mr. Shambiev order to make MVA Chart/Map for joint team of TF1 and 3. He assigned the responsible persons and set deadlines as below. -TF1 (TF1's Project activity): Mr. Payrav assigned Mr. Firudvs as ATC -TF3: Mr. Khumorov assigned Mr. Akbar as Flight Procedure Designer -The technical discussion will be held by joint team by 15 June. -Mr. Payrav will send Expert e-mail for clarifying un-clear instructions on "MVA Map Dev" by 14 June. -The joint team conduct technical analysis for Approach Area by 14 Sep, for ACC by 31 Aug. -APP/ACC Chart drafting deadline is set in 28 Sep, Approval by CAA by 31 Oct. -Install MVA Chart layer in to Master, deploy MVA Map to ATC and AD Sim training start by 31 Oct.
12	Flight Check	ATC-1 Expert instructed that the flight check by actual aircraft is not necessary. The meeting accepted this.
13	Segmentation (sectorization)	PC asked more detail and Japanese instructions of the description on "Make the outer edge of the segment as consistent as possible with the azimuth, distance or fix from the range mark, air safety wireless facility, aviation security wireless facility etc." to ATC-1 Expert, and waiting the reply.
14	Inquiring MAvA by PC	PC forwarded the reply e-mail from Malaysia in 8 June. They are using the term Surveillance Minimum Altitude (SMA) - refer Annex 4 Chapter 21 For calculation refer Doc 8168 PANS-OPS Chapter 6 para 6.2.2 i.e. 300m (984ft) above obstacle and 5NM (3NM within 20NM of Radar head) away from obstacle.

2. Progress of other 1-4 tasks

a) Mr. Payrav committed to send the letter to CAA by 14 Sep. for requesting to change the higher documents in regard items #6, 7, 8 and 9. The meeting confirmed that it is premature and meaning less to draft those descriptions in TAN's Operation Manual before changing regulations by CAA.

b) Mr. Payrav will send the notification letter on item #4 to Dushanbe Airport (DIA) by 15 June. Project will close this item by confirming the copy of the letter above, because the "follow-me-car" operation is DIA's business.

c) The meeting confirmed Light Gun task (item 3) as below.
-Conduct analysis for clarifying the document change is required or not by 19 June.
-If Operation Manual Change will be required, revise it by 31 Aug.
-Procure 4 sets of Light Gun by Rajabov by 31 Aug.
-Complete radio frailer scenario making for AD Simulator by 28 Sep by TF1.
- DDG proposed to have the seminar in Sep.

PC reminded that this Item #3(Light-Gun) and #16 (MVA Map) are only visible outcomes from TF-1 1-4 activity which was implementing for the last two years as the 1-4 summary table below. Project hopes that TF1 will closely complete these items no later than JICA HQ's final evaluation mission in the early October 2018. The meeting and TF1 agreed on this opinion.

1-4 Summary table agreed at TF1M/16:

Summary on Activity 1-4 (20180424)

	ATC-1 Expert's Recommendations in 20181/23&/2/2 (TF1M/13)	Yoshida 2017/2/8 +2/10 mail	Watanabe 2017/8/14 compere	2017/10/9 observe	18/1/15 analysis	Effected Manuals UTDD	Others Airports	External Audits Findings USOAP 2008/7	EANPG 2011/10	ICVM1 2015/6	ICVM2 2016/10	TF1 MAvA Findings Group1 2016/7	Group 2 2016/10	MAvA-I 2017/8	W/G & Safety found	TF1(Manual Review W/G)'s status
1	Landing clearance Proc (Change an organization)			Yes	Yes	4D 4.5.3									Yes	To prepare revised manuals by one month before new ATC tower operation.
2	Same frequency issue (Separate radio channel)				Yes	4D 1.4 6D 1.6									Yes	To prepare revised manuals by one month before new ATC tower operation.
3	Light Gun (Should introduce it)	Introduce Light gun		Yes	Yes			1-7-10		ANS 1) -e)		Yes	Yes		Yes	Accepted (Buy 4 sets by end of Sep 2018)
4	Follow-me-car operation (Return original proc)			Yes	Yes	4D 4.5.1&3										TAN will notice DIA Expert's finding. (by the end of May 2018)
5	Low intensity of Air traffic (No Recommendation)					14D 1.9	10H 1.9								Yes	N/A Need ATS Capacity Assessment Survey
6	Separation VFR (5.2.1) (Revise 300m to 150m)				Yes	6D 5.2.1						Yes	Yes		Yes	Accepted (TAN will make proposal to CAA for changing it by Nov 2018)
7	Sepa VFR (5.2.1.2&2.3) (Delete Sentence)		Yes		Yes	6/8/14D	8/10H									Accepted (TAN will make proposal to CAA for changing it by Nov 2018)
8	IFR Lateral separation (Add Doc 4444 5.4.1)	Cross B/ Lateral S	Yes		Yes	6/8/14D	8/10H					Yes	Yes			Accepted (TAN will make proposal to CAA for changing it by Nov 2018)
9	Separation VFR (5.2.3.2) (Delete Sentence)		Yes		Yes	6/8/14D	8/10H									Accepted (TAN will make proposal to CAA for changing it by Nov 2018)
10	Transfer control altitude (Change Radar part)														Yes	To prepare revised manuals by one month before new ATC tower operation.
11	Introducing FPS (Not Necessary)	Introduce FPS			Yes							Yes (eFSP)	Yes (eFPS)	Yes 4.13.3.1		Accepted → But TOPSKY has eFPS (No need to do anything)
12	Radar Handover (No Problem / No need)	Rader ID Hand-off			Yes											Accepted (No need to do anything)
13	Speed control (No Problem / No need)	Speed Adjust		(Yes)	Yes								Yes	Yes 4.6.3.5		Accepted (No need to do anything)
14	STCA (No Problem / No need)				Yes			1-7-10							Yes	MASTER has STCA function, but no procedure. (If no need, OK)
15	MSAW (Necessary to describe)				Yes			1-7-10							Yes	MASTER function is not fulfilled. No procedure, but improve S/W first.
16	MVA Map (Need to create map)				Yes				Chart							TAN will order to make new one to TF3. (by the end of Nov 2018)
a	Already Complied ICAO (No Findings)				17 Jan e-mail	N/A	except. 8H/10H									Accepted (No need to do anything for 3 airports)
b	Non-efficient Handovers (Introduce full OLDI?)		New Proposal in 28 Feb 2018													N/A Need Coordination with UZ, AF, KG

3. ATC and AD Capacity Assessment Methodology (additional task in 1-4)
In the TF1M/18, Mr. Payrav reported that 6 days data collection with using new survey forms for ATC and AD (RWY Capacity only) were started 5th June. The meeting confirmed the progress of assessment schedule as follows.

11 June: All ATC shift teams will submit the raw data to TF1 management.
12 June: Start calculation by 5 participants using Expert provided Excel forms.
13 June: Send filled excel forms to ATC-1 Expert.
29 June: Obtain the results (UTDD, ATC and AD (RWY) by Japanese methodologies.

The meeting asked Mr. Payrav the result of 3 days additional workshop in May for introducing Japanese methodologies and modify it to TAN. He answered that five participants received the certificates (attendance), and the survey forms (ATC and AD (RWY only), excel forms and Japanese methodology explanation papers were provided by ATC-1 Expert.

DDG ordered TF1 WG (5 participants) to verify the result figures by Japanese technologies first by 29 June, then WG should analyze Japanese, Uzbekistan, Russian and ICAO Docs and pick up appropriate part of technics by 31 July.
After verified the result of the analysis above, TF1 WG should make a draft of "ATC/AD Capacity Assessment Procedure Document in Tajikistan" by 28 Sep, then start process of approval by CAA. Then, TF1 WG will complete the survey by using this document for three airports by 1st Nov 2018.

For withstanding inquiry from CAA and ICAO, for example how to obtain this figure or what is a basis for peak volume model, the meeting agrees to make Tajikistan's original procedure document same as Uzbekistan which has clear descriptions about formulae and models in Tajik airspace.

The meeting agreed DDG's decision above.

4. 1-5 OJT-I Observation
In accordance with 1.6.4 in MM on TF1M/17, Mr. Shuhrat agree to translate "Check List" into Russian and use it, but the Meeting couldn't confirm the result of Russian version of the "Check List".

The updated OJT Annual Training Plan 2018 is not available yet, even Mr. Payrav committed to send it to the Expert in MM on TF1M/17.

PM will contact them for confirming progress by 14 June.

5. 1-5 Examination System Development
Refereeing to the four recommendations by ATC-1 Expert, PM confirmed outcomes one by one.

1) Implementing written examination / the examinations are done by PC (This isn't OJT theoretical part)
2) Determining the passing line / the passing lines are set as 75%, 80% and 95%?
3) Placing the instructor in the training room / the meeting will confirm TF1 management agreed it or not.
4) Revising the necessary rules /?

With reference to the discussion on 3) above, PM commented that Mr. Mansuri was already assigned as the person in charge of the training. He will confirm Mr. Shuhrat the meaning of this 3) recommendations.

DDG ordered Mr. Payrav to check the all documents for examinations, then if the passing lines are not described in it, add it as it is by 26 June.

PC will ask ATC-1 Expert for the conclusion of 4) and actual outcomes of this activity.

6. ILS 27 FPD / GV issue (TF3)
PM explained the detail situation of RWY27ILS FPD outsourcing to szrcai (St.P) by DIA.
PM confirmed that DIA has remitted 50% of payment in today, 8 June.

The meeting confirmed that a "Job Description" on FP designers will be made by Mr. Khumorov by 19 June under Mr. Firuz's oversight. After that, assigning two FP designers (Mr. Akbar and Mr. Ilhom) by 29 June, then other two by 20 July by AIS management.

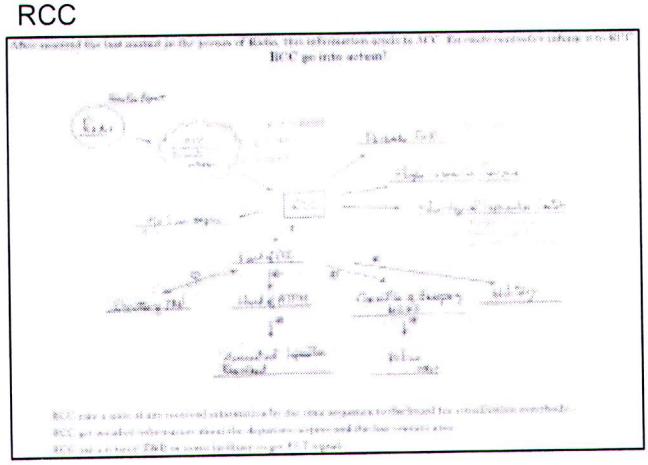
The meeting agreed to dispatch Mr. Akbar to szrcai from 25 to 29 June for leaning design check and GV issue, using RWY27-ILS FPD outsourcing opportunity by the Project budget. PM explained that Project diverts the budget for FPD-QA training in China to this business trip. Instead of this treatment, FPD Expert made FPD-QA training in September. TF3 Leader Mr. Firuz requested the Project to send two (one FPD designer for G/A & one AIS department officer for obtaining FPD knowledge), but PC couldn't accept this request due to remaining budget constraint. PC will ask Mr. Akbar to learn whole image of FPD works then share it with AIS department.

7. SAR/RCC (TF3)
PM explained AIS Expert schedule in July and show the figures below.
The meeting discusses AIS Expert's schedule for implementing SRA/RCC coordination exercise.

The "Plan of SAR working group activity" will be made by Mr. Firuz by 26 June.

Meeting agreed the AIS Expert's mission schedule in July as it is, the pass will be prepared by Mr.Firuz before the arrival date and PM will reply the acknowledgement.

RCC



Schedule of the Coordination Meeting in July

Tajikairnavigation
Agenda
the first Exercise on SAR/RCC coordination meeting

Date	July 11, 2018	Time	1:30 p.m. -3:00 p.m.
Location	Meeting Room in Tajikairnavigation		
Meeting Title	Coordination meeting for the first Exercise on SAR/RCC		
Called by	-	Facilitator	Sheraliev Bakhtiyor

Dushanbe, 12 June 2018

A. Shambiev
First Deputy Director General
TAJIKAIRNAVIGATION

B. Sheraliev
Project Manager
TANJIKAIRNAVIGATION

D. Rajabov
Taskforce-1 Leader
TAJIKAIRNAVIGATION

Mr. Mukhamadaminshoev
Taskforce-3 Leader
TAJIKAIRNAVIGATION

Attachment-A: Five pages of technical reference for making MVA Chart/Map
Attachment-B: The last two pages of MM on TF1M/17
Attachment-C: "MVA Map Development (as attachment-5 on TF1M/17 MM)

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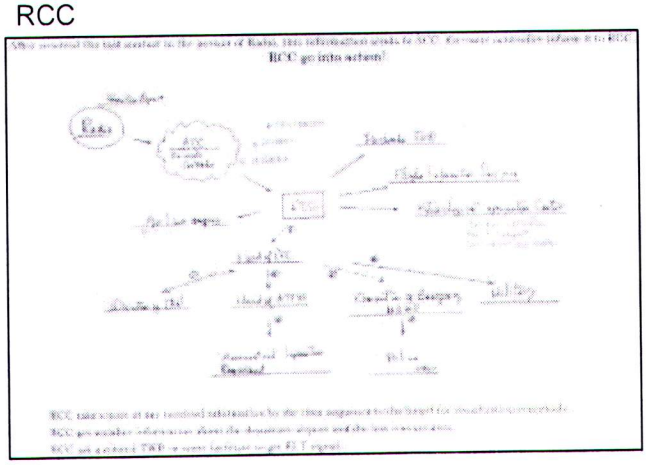

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Previous Page

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- Expert sent the necessary documents for calculation such as updated survey forms, detailed calculation method, and Excel table to Mr. Darvon and Mr. Payrav.
- We were completed the W/S on Runway capacity calculation.

4. Expert gave the certificate to 5 participants for ATS capacity calculation.

(6) Observation OJT-I training

1. Four OJT-I participated the session. Expert cannot do observation in the control room today because of training schedule.
2. Expert explained the prepared checklist of OJT-I training for each item and confirmed whether it is being implemented. Only the item "ask to the evaluation of other instructors" is not implemented. It is one to one training in TAN, therefore it is not to ask to the evaluation of other instructors. All other items were carried out.
3. Expert confirmed the current implementation situation of OJT-I training in 2018.Mr. Gulomjon and Mr. Hotamjon have trainees as OJT Phase. Expert decided to observe Gulomjon's OJT training on Saturday 12 May. Furthermore, expert will observe Hotamjon's OJT training on Monday 14 May.
4. The expert sent the checklist for OJT-I training to the participants. Mr. Shuhrat will translate it into Russian and plans to use it for future training.
5. Mr. Payrav will send updated OJT-I Annual training plan 2018 to the expert.
6. <Observation 1> 12 May 2018

- When the expert reconfirmed the annual OJT-I training plan, it turned out that Mr. Gulomjon (OJT-I) is carrying out training on Saturday, expert decided to observe by going to the training center.
- Expert observed the OJT-I training at control room for 1 hour from 9 o'clock to 10 o'clock.
- Mr. Abdurahmon (trainee) copies the operation manual, necessary regulations (especially control interval), SID / STAR etc., fills in necessary notes on his notebook, and learns them. These must be prepared as trainees before OJT.
- If there is no traffic for radar control, Mr. Gulomjon ask the trainee and confirm whether he has the necessary knowledge.
- At this time, he asked "What will happen to departure / arrival aircraft from RWY 09 at Dushanbe Airport if the Shooting airspace used by the military?". In this case neither departure nor arrival can be done.
- Mr. Abdurahmon has been 12 years since obtaining the APP qualifications, and he is familiar with the work of the adjacent Radar position. However, the required training time is the same. He will complete training in May.

7. Observing the OJT-I training at control room, expert confirmed that the training based on ICAO standards is being implemented.
8. <observation 2 > 14 May 2018

- Expert observed Mr. Hotamjon's OJT-I training at the control room from 8: 00 to 9: 00.
- Expert confirmed the materials prepared by the trainee because there is no traffic.
- The trainee himself explained to the expert about the contents. It was described in his notebook considerably in detail. For example, in addition to the height of the mountain handwritten, its safety altitude was also listed. In addition, visual approach diagram of VFR aircraft was described.
- Basically, the operation manual is described by extracting each item. It is a way to remember in this way. Almost training has been completed and he is waiting for final approval from FDDG.
- Trainee is continuing his studies in regard to what seems to be less satisfactory.
- Mr. Hotamjon was carrying out training based on training in Malaysia and expert training. Expert checked this with the prepared checklist.

(7) Examination system development

1. W/S on the examination system development was held from 09:00.
2. Mr. Hotamjon, Mr. Gulomjon and Mr. Mansur were participated.
3. The expert explained the training system in Japan. the number of controllers was so large that it seemed not to be able to make an image of the training room well compared with TAN.
4. They seemed not believe that five newcomers were placed every four months, and 11 instructors in Tokyo ACC.
5. After explaining the Japanese examination system, expert proposed 4 recommendations such as (1) implementing the written exam (2) determining the passing line (3) placing the instructor in the training room (4) revising the necessary rules. We discussed the recommendation.
6. As for the written examination, it is not done with TAN, but they are carrying out the test using the PC, and the score is calculated and displayed automatically when the exam is over.
7. Passing lines are set according to qualification acquisition status. Finally, FDDG decides that.
8. As for the placement of instructors, there is no need additional instructor because there is not much trainee at present time. However, in order to maintain the level of ICAO standards, it is necessary to arrange one dairy-working instructor to teach theoretical training.
9. Expert held W/S for Mr. Shuhrat who could not participate yesterday.
10. Expert explained the training system and examination system in Japan. Finally, Expert asked for opinions on the Recommendation.
11. He said that the examination of the theoretical training is still done by PC, and no written exam is done. In the PC exam, the passing line is 75% in the first certification, 80% in the second and 95% or more in the third. The passing line is set according to experience. Also, card type examination is carried out, questions are written in the card turned inside out, and the trainee answers this. It seems to be something like a game sense test.
12. He also agreed to arrange the daily-work instructor newly at the training center.
13. Regarding the passing line, since it is not described in the training manual, it is necessary to specify it in some document.
14. Expert consider training manual in TAN to amend if necessary.

II. Next dispatch of the expert

(1) Experts proposed tentatively that the next dispatch of expert will be as follow;
/In November 2018: Mr. WATANABE (Chief Advisor)
(2) TF-1 agreed the schedule of the next dispatch.

As a result of the activity, both sides confirmed the matters referred to in the documents attached hereto

Dushanbe, Tajikistan
16 May 2018

Mr. Khusenov PAYRAV	Mr. Hideo WATANABE
Head of ATC	Chief Advisor
Sub-Leader of Task force 1	JICA Expert team of the project
SUE "Tajikairnavigation	Japan International Cooperation Agency

渡邊秀夫

Attachment-1: TF-1 & 2 Activity Plan
Attachment-2: The activities report (2-1~2-6)
Attachment-3: Calculation detail procedure
Attachment-4: Examination system development in TAN
Attachment-5: MVA MAP development
Attachment-6: Checklist for OJT-I training

Attachment-B
(last two pages of TF1H/17)

Attachment-C

Attachment-5

MVA MAP Development

Chief Advisor
Hideo Watanabe

1. Establish MVA

(1) Determination of MVA

MVA can be made higher altitude according to standards, taking into consideration the characteristics of air traffic, control airspace or the performance of radar equipment.

In particular, regarding ASR, MVA in areas where the traffic flow changes dramatically, such as mountainous areas, will be over 2000 ft above the obstacle unless special need arises.

(2) Relationship between MVA and other specified altitudes

Matching between MVA and other designated altitudes (MEA, MDA, MRA, etc.) is not necessarily required.

(3) Relationship between MVA setting range and radar covering area

As a general rule, the range of MVA shall be the maximum coverage of the radar which is theoretically calculated. However, it does not preclude consideration of effective coverage of the radar.

(4) Flight check related to setting of MVA

Since the effective coverage of the radar is not constant and the radar target is identified and validated by the air traffic controller, it does not need a flight check for MVA setting.

2. How to create MVA map

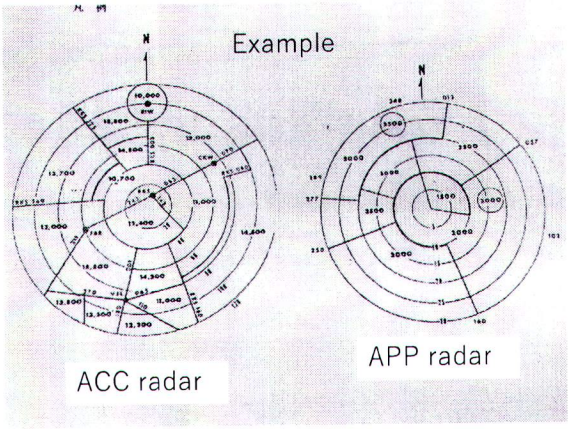
(1) Match the center of the figure with the radar site. However, this is not the case when creating one MVA map for multiple radars.
(2) The segment shall have the necessary and appropriate size for implementation of the radar control service. However, in an airspace having a single remarkable obstacle, it is possible to set a segment in which the obstacle is located so that the MVA of the segment does not become excessively high altitude due to the obstacle.
(3) Make the outer edge of the segment as consistent as possible with the azimuth, distance or fix from the range mark, air safety wireless facility, aviation security wireless facility etc.
(4) In determining segment MVA, consider errors of radar equipment.

2. Inspection of MVA map

In order to ensure its appropriateness, check the MVA map at least once a year and take necessary measures.

WHO ?
HOW ?

Example



ACC radar

APP radar

END

www.tj-ats.com

Лоиҳа оид ба баланд намудани потенсиал дар самти хизматрасонии ҳаракати ҳавой
Проект по повышению потенциала в сфере обслуживания воздушного движения
The Project for Capacity Development in Air Traffic Services

Attachment-A (5 pages)

КАРТА БЕЗОПАСНЫХ ВЫСОТ РАДИОЛОКАЦИОННОГО ВЕКТОРЕНИЯ

ДУШАНБЕ, ТАДЖИКИСТАН
ДУШАНБЕ

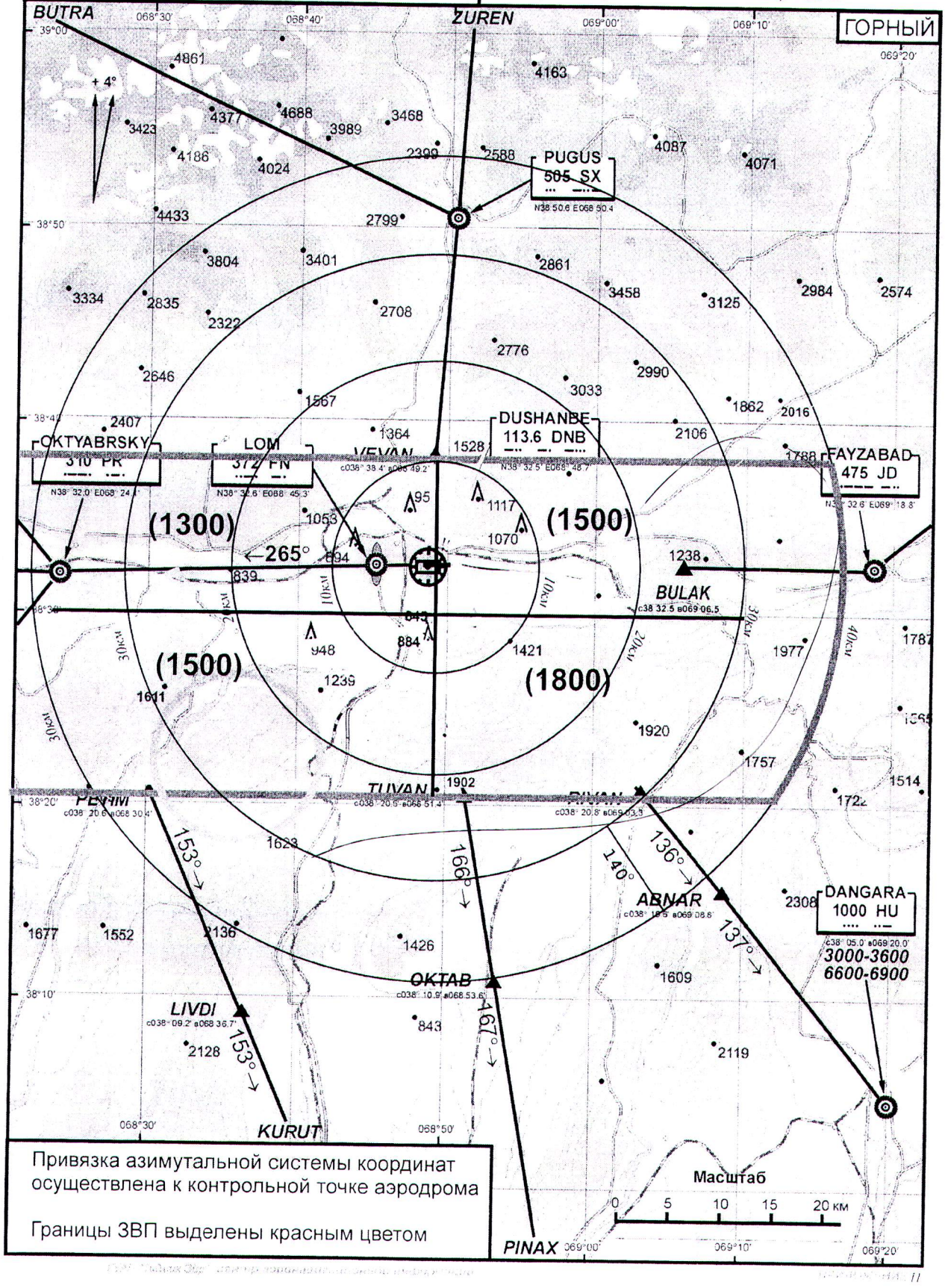
22 ноября 2007

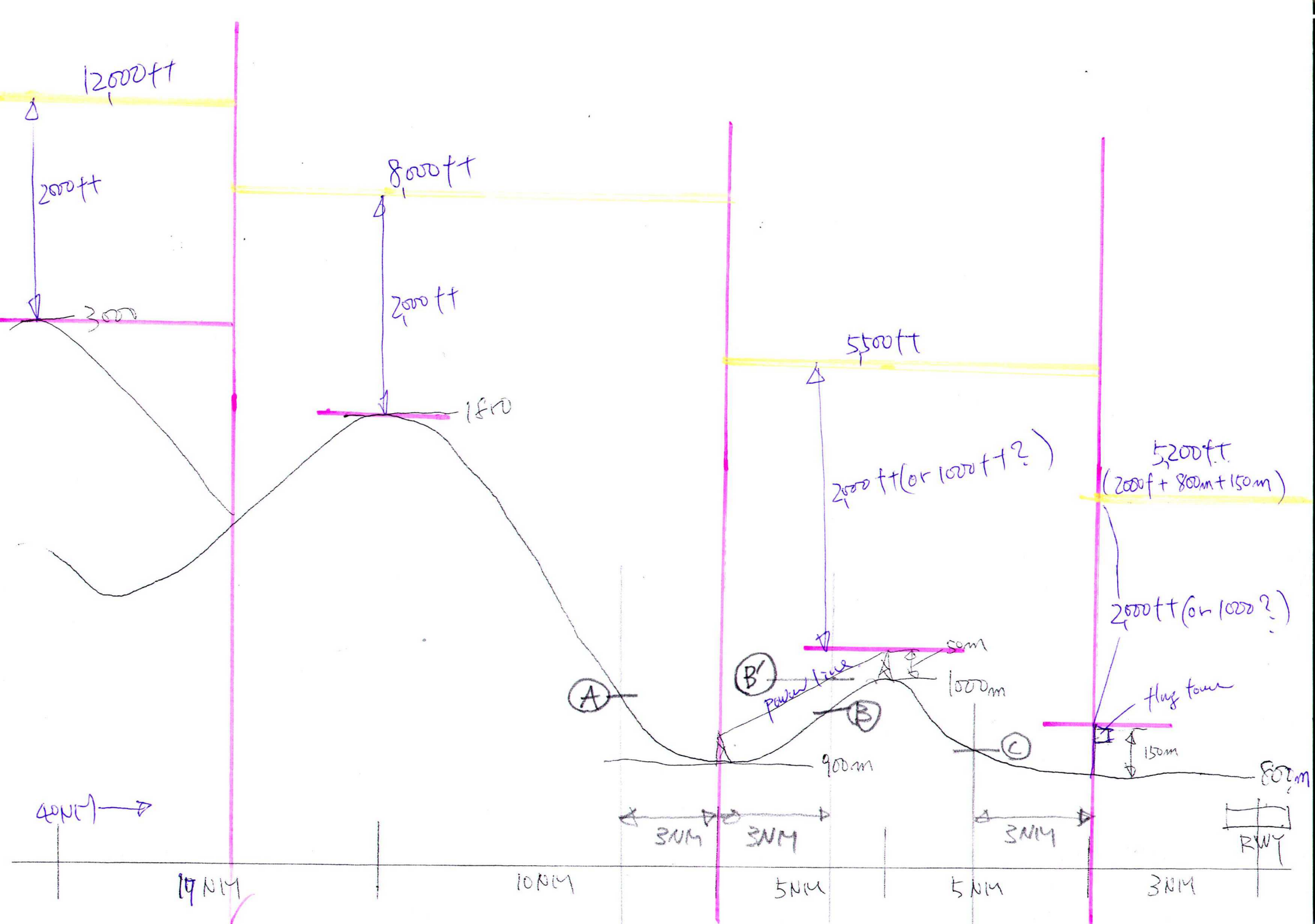
АТИС	126.2
РАДАР	119.2

Эшелон перех: 1 Высота перех: *(1800)*

Высоты - метры Расстояния - км Координаты - СК-42

Наэр 785 м



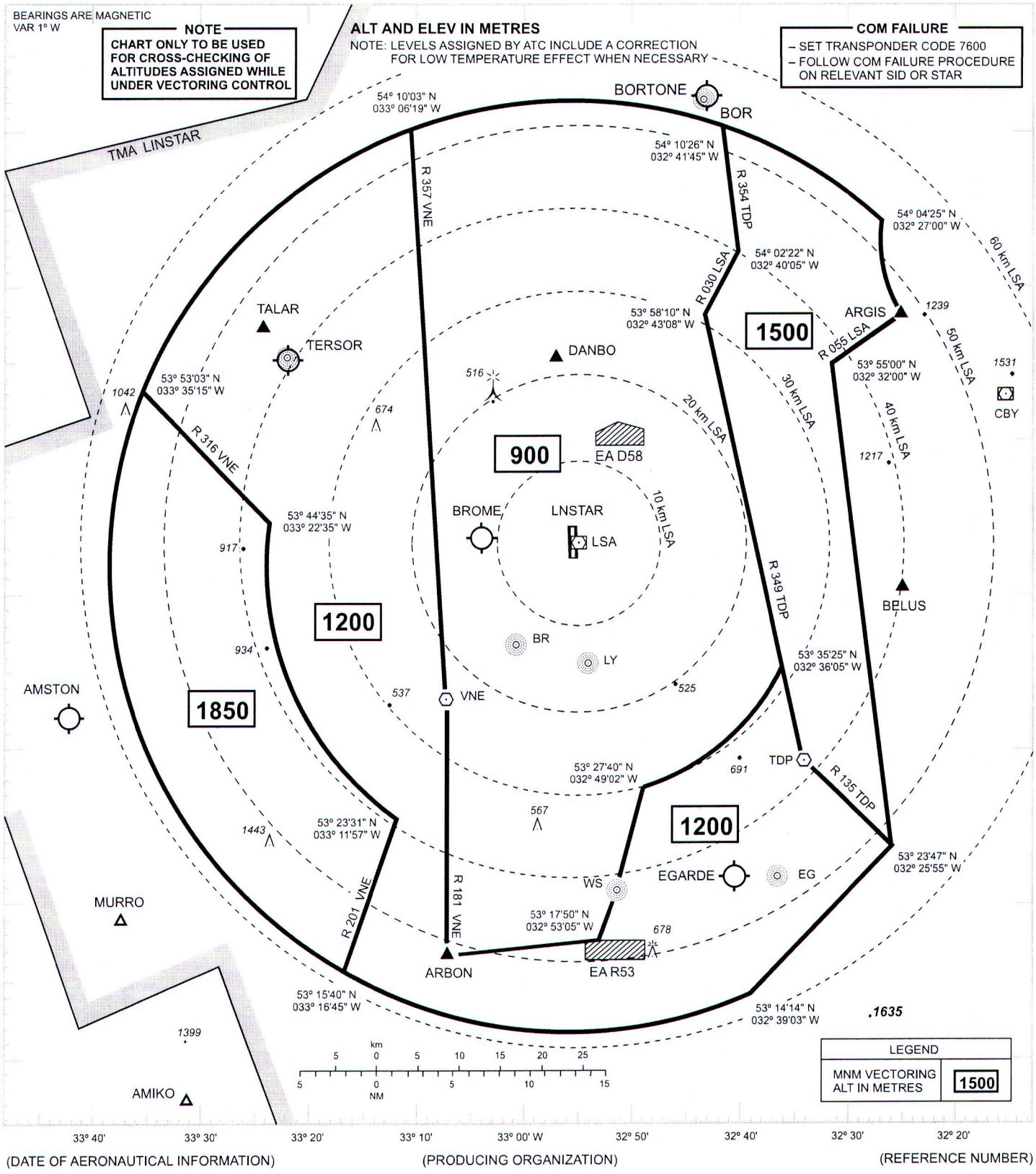

12,000ft
2000ft
3000
8,000ft
2000ft
1500
5,500ft
2000ft(or 1000ft?)
5,200ft
(2000f + 800m + 150m)
2000ft(or 1000?)
A
B'
B
C
50m
1000m
900m
flug town
150m
800m
40NM
19NM
10NM
3NM
3NM
5NM
3NM
5NM
RWY

ATC SURVEILLANCE MINIMUM ALTITUDE CHART — ICAO

AERODROME ELEV 250 m
TRANSITION ALT 2150 m

APP 119.8

LINSTAR/Intl (EADL)



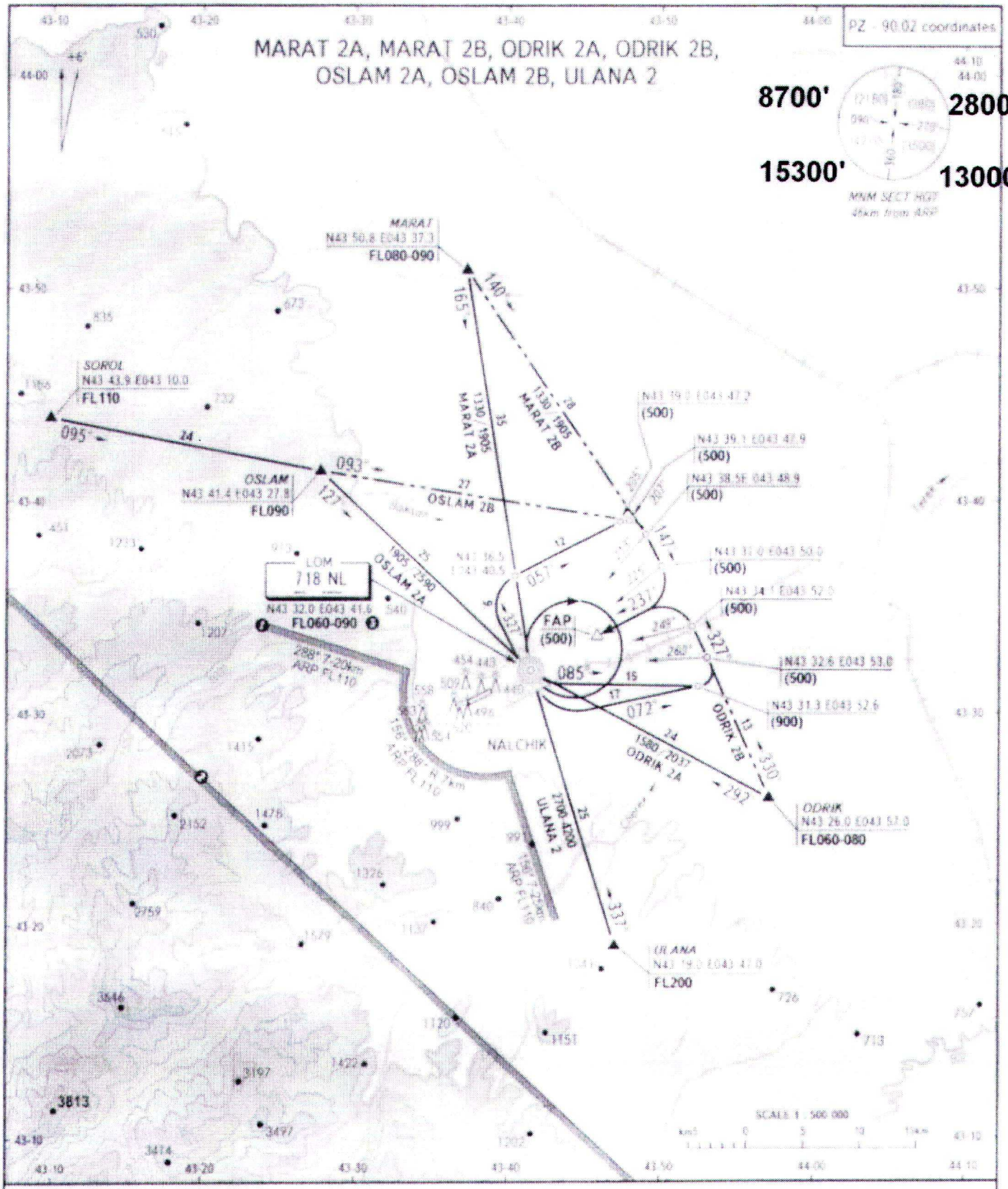
CHANGE: New Chart

(DATE OF AERONAUTICAL INFORMATION) (PRODUCING ORGANIZATION) (REFERENCE NUMBER)

STANDARD ARRIVAL CHART INSTRUMENT (STAR) - ICAO

TRANSITION LEVEL FL060

NALCHIK, RUSSIA
NALCHIK
RWY 24



APPROACH	126.9 (Additionally serves as RADAR)
TOWER	118.3

WARNING

1. MARAT 2B, OSLAM 2B and ODRIK 2B arrival routes shall be used under radar control and by ATC instruction.
2. ATS at FL090 or above is provided by Mineralnyye Vody ATS unit.
3. Arrival from CRP ULANA: after passing LOM NL turn RIGHT descending to FL080, then according to IAC.
4. Line to the south of which IFR flights below FL110 are PROHIBITED.
   Line to the south of which IFR flights below FL200 are PROHIBITED.
   FL090 140 from CRP ULANA

BEARINGS AND TRACKS ARE MAGNETIC
ALTITUDES, HEIGHTS AND ELEVATIONS ARE IN METRES
DISTANCES ARE IN KILOMETRES

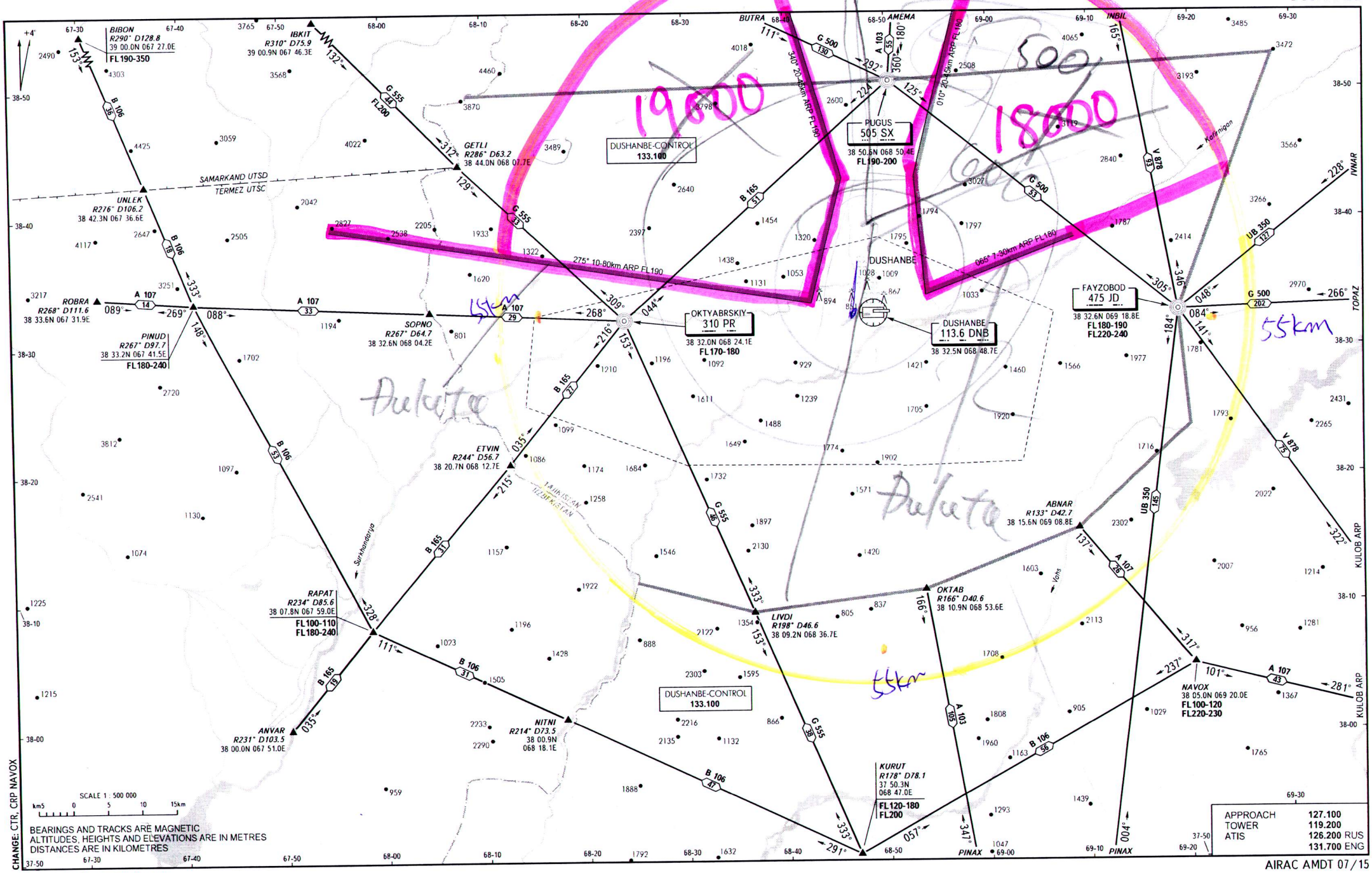
CHANGE: TL, FL, WARNING

DUSHANBE, TAJIKISTAN

AREA CHART - ICAO

ARRIVAL, DEPARTURE
AND TRANSIT ROUTES

DUSHANBE



Minutes of The Task Force-3 Meeting
for
"The Project for Capacity Development in Air Traffic Services"
in Tajikistan
Dushanbe, 9 July 2018

The 17th Task Force-3 (TF-3) Meeting for "The Project for Capacity Development in Air Traffic Services" (hereinafter "the Project") was held on 9 July 2018, 09:30 am -12:00 am at the Head of Main Center office of ATC Center in Tajikarinavigation.

The Meeting was composed of, Mr. Muhamadaminshoev Firuz (TF-3 Leader), Mr. Khumorov Bakhtiyor (TF-3 Sub-Leader), Mr. Sheraliev Bakhtiyor (Project Manager), Mr. Orita (Project Coordinator in JICA) and Mr. Sukegawa (AIS Expert in JICA).

Purpose of this meeting
Confirmation and make clear on the schedule of SAR/RCC Corporation Exercise, detailed of it and SAR/RCC Operation manual completed.

Agenda;
a) Explanation of a mission of JICA expert regarding schedule on July
b) The pace of preparation for Wednesday afternoon meeting by TAN
c) Positioning and operation of RCC

Agenda a)
JICA Expert who is Mr. Sukegawa, explained the schedule on July and duties as follows;

a. Submit a draft of SAR/RCC operation manual

   The second version of a draft of SAR/RCC Operation Manual is prepared by JICA expert.

b. Preparation of SAR/RCC Coordination Exercise (SRCE)

   Preparation work, and preparation meeting on Wednesday afternoon, July 11th, 2018 with any related persons due to keep running operation smoothly toward implementation of the SRCE on Friday morning, July 13th.

c. Implementation of SRCE

   This will be implemented on Friday morning, July 13th followed by as attached the Scenario.

d. Implementation Seminar regarding of SAR Coordination Manual Completion

   This will be scheduled to hold on Tuesday morning, July 17th, 2018.

   There are two items which one of the draft of SAR/RCC operation manual and the report of result of SRCE on July 11th.

Agenda b)
JICA Expert ask the current pace of preparation for Wednesday afternoon meeting by TAN.
Explained this situation by Mr.Firuz as follows;

- Coordination with related persons in TAN are now underway.
- As for the rest, it is not conducting to coordinate with them.

JICA Expert made a point "please contact outside of TAN and appeal for participant to SRCE for successful SRCE".

Agenda c)
After a lot of discussion, Mr. Firuz made sure the placement of RCC is in the Main Center, operation is 24 hours on a rotating schedule, and leading role of RCC job is carrying out on Coordination with related section or organizations.

Noted above are agreed with all attendant persons.

Muhamadaminshoev Firuz	*Shinichiro SUKEGAWA*
TF-3 Leader	*TJ-ATS Project AIS Expert*
State Unitary Enterprise “TAJIKAIRNAVIGATION	ATCA-Japan

Minutes of The Task Force-3 Meeting
for
"The Project for Capacity Development in Air Traffic Services"
in Tajikistan
Dushanbe, 31 July 2018

The 18th Task Force-3 (TF-3) Meeting for "The Project for Capacity Development in Air Traffic Services" (hereinafter "the Project") was held on 31 July 2018, 13:30 pm -15:00 pm at the Simulator Room in Dushanbe ACC in Tajikarinavigation.

The Meeting was composed of, Mr. Muhamadaminshoev Firuz (TF-3 Leader), Mr. Khumorov Bakhtiyor (TF-3 Sub-Leader), Mr. Payrav Khusenov (TF-1 Sub-Leader), Mr. Asadullo (SAR WG), Mr. Orita (Project Coordinator in JICA) and Mr. Sukegawa (AIS Expert in JICA).

Purpose:

This meeting is accomplished to report a finalizing July's mission by the WG in TF-3 and discussion about RCC operation in TAN.

Agenda:

1. JICA Expert Activity Report in July
2. Review on Exercise of RCC Operation
3. SAR/RCC Operation in TAN
4. Preparation of Seminar of RCC operation manual completion on September

1. JICA expert explained the activity report on July's mission about SAR/RCC operation in Tajikairnavigation followed by revised schedule.
A main prolong reason is not completed to prepare the draft of SAR Operation Manual, and which name is exchanged to "the draft of RCC Operation Manual" by Working Group.

2. Successfully Exercise was practiced with the cooperation of all related persons. AIS Expert appreciated the good collaboration on the first Exercise by Tajikairnavigation.

This Exercise of scenario was prepared a followed by ICAO Annex 12. However, the draft of RCC Operation Manual was not completed, so we didn't used and followed this manual.
Exercise was executed to place an original target separately, focused to have any communication skill which are how to make the exercise scenario, reception documents, communication list, operation check list and to prepare the useful tool.

3. SAR organization already is started to as the Committee of Emergency Situation(CoES) and Civil Defense(CD) since about 2015 supported by United Nation for the measures against natural disasters. The agreement between the CoES and Aviation Enterprise on January 2015 confirmed as attached file in RCC manual, however, Discussion area in this document is only within 8km radial of Dushanbe International Airport which is not covered all of Tajikistan' area.

It is necessary to be established about SAR/RCC organization and to prepare to start the RCC operation. RCC Operation Manual is almost completed on the end of July by Working Group who

Mr.Asad and Mr.Akobir are assisted on further task. It should be needing to insert or to amendment some information of attachment which you want to it after a review. And, which is translated to Russian for approval by CAA.

RCC organization should be established hopefully until 10-20 August 2018.

4. In regarding Seminar on September, it will be giving this seminar the status of completion of RCC Operation Manual development as the end of work in sub activity number 3-1 which is supported by AIS expert who is Mr.Yamane.

Title: Seminar on SAR/RCC Operation Manual Completion
Date: 10-15 (0.5 day) September 2018
Place: Meeting room in ACC
Participants: All TAN, MOT, CoES, Airlines
Content:

1. Background and summary of the SAR/RCC by Mr.Asad
2. RCC policy in conjunction with getting set up in TAN by Mr.Akobir
3. Detailed of RCC Operation Manual and introduce the draft of AIP(GEN3/6) by Mr.Khumorov
4. Greeting with JICA expert / Mr.Yamane

Facilitator: Mr.Payrav
Ultimate responsible person: Mr.Firuz

Noted above are reached to agree with the outline that how to operate TAN's RCC and useful offer by JICA expert.

List of Attachment which are installed in USB.
1. Expert schedule and activity report.
2. Draft of RCC Operation Manual.
3. Exercise documents within Scenario.
4. Related documents for SAR.

31 July 2018, Dushanbe

Muhamadaminshoev Firuz
TF-3 Leader
State Unitary Enterprise "TAJIKAIRNAVIGATION

Shinichiro SUKEGAWA
TJ-ATS Project AIS Expert
ATCA-Japan

Minutes of The Taskforce-3 Meeting for "The Project for Capacity Development in Air Traffic Services" in Tajikistan Dushanbe, 14 September 2018

The 19th TF-3 Meeting for "The Project for Capacity Development in Air Traffic Services" (hereinafter "the Project") was held at 9:00 – 10:00 on 14 September 2018 at the classroom in Training Center of Tajikairnavigation. The meeting was organized with Mr. Sheraliev Bakhtiyor (Project Manager/TF-2 Leader), Mr. Gafarov Bakhriddin (QMS), Mr. Tadzhibaev Akbardzhon (FPD), Mr. Mubasirov Chorshanbe (FPD), Mr. Kuliev Ilhom (FPD), Mr. Orita (PC), and Mr. Yamane (TF-3 FPD Expert).

Agenda;

a) Summary of activity report of "Observation for FPD in DYU, and FPD-QA Training and W/S"
b) Other business

Agenda a)

Mr. Yamane, FPD Expert explained the summary of activity in this term in TF-3 by showing the attachment-1, actual schedule and the attachment-2, report on activity of "Observation for FPD in DYU, and FPD-QA Training and W/S".

Mr. Yamane explained the main points of outputs conducted, conclusion and recommendation as described. Concerning FPD team working, they tried to design new STAR connecting ILS RWY27 approach which has been already designed by outsourcing under Expert's instruction, and they still need time to complete all 3 STAR. Mr. Yamane accepted that he will make a commen for the design review and the evaluation of their checklists after finishing design and documentation of new STARs.

Concerning MVA chart construction, FPD team made a draft chart, and Mr. Yamane requested to review the area devision and altitude against obstacles on the total criteria as well as ATS operational requirement.

Concerning FPD-QA training, Mr. Yamane explained that it became shorter than an original schedule with mainly lecture of ICAO Doc 9906, FPD QA manual, vol.1, 2 and 5 effectively because of the priority of FPD works, and Mr. Yamane assisted to produce temporary design checklist and conducted the trial design review with it. Mr. Yamane requested to modify the checklist by menbers concerned together and conduct the exact GV with the upgraded checklist, accordingly. Some of FPD team and QMS personel were recognized to undestand QA manual basically and conduct GV on their primary level. 4 participants received the certificate attendance for this training course..

Mr. Yamane summarized above and concluded that the whole activity of following up FPD and FPD-QA basic training have been ended progressively, but CP must proceed on all FPD servoces stedily and accomplish updated flight procedures practically. Therfore, The attendances accepted both the report and the result of activity.

Agenda b)

Nothing was noted.

Dushanbe, 14 September 2018

Mr.Sheraliev Bakhtiyor
Project Manager
TAJIKAIRNAVIGATION

Mr. Atsushi Yamane
TJ-ATS Project TF-3 FPD Expert
ATCA-Japan

Attachment:

1. Actual schedule of activities
2. Report on Activety.

TF-3 Activity (Actual) By TF-3 FPD Expert: Mr. Yamane

3-5 Observation for FPD in DYU (2) and FPD-QA Training and W/S (3)

Month	Day		Activity		Venue	Remarks
			AM (09:00-12:00)	PM (13:30-16:30)		
Aug	27	Mon	(Departing Narita)			
	28	Tue	(Arriving in Dushanbe by KC131)			Expert arrives
	29	Wed	Confirmation of objects and schedule	Review of FPD team & design output	T.C.	Receive ID, Start Activity
	30	Thu	Instruction & Construction of MVA Chart for UTDD		FPO	FPD team
	31	Fri	Instruction & Construction of MVA Chart for UTDD		FPO	FPD team
Sep	1	Sat				
	2	Sun				
	3	Mon	Instruction & Construction of MVA Chart for UTDD		T.C.	FPD team
	4	Tue	Follow-up of design and documentation - general issues		T.C.	FPD team
	5	Wed	lecture of general FPD-QA & GV	Abstract of QA manual (vol. I, II, III & V)	T.C.	FPD-QA
	6	Thu	Points of IFP process - general, data & design	Points of IFP process - study & documentation	T.C.	FPD-QA
	7	Fri	Points of IFP process - validation	Points of IFP process - approval & maintenance	T.C.	FPD-QA
	8	Sat				
	9	Sun				
	10	Mon	(national holiday)			
	11	Tue	Design and documentation for new STAR in UTDD, Trial preparation of GV checklist		T.C.	QMS/FPD team
	12	Wed	Design and documentation for new STAR in UTDD, Trial preparation of GV checklist		T.C.	QMS/FPD team
	13	Thu	Discussion & evaluation about outputs of FPD	Wrap-up all activity on FPD	T.C.	FPD team
	14	Fri	TF-3 meeting	JICA report	T.C.	Close Activity, Return ID
	15	Sat				
	16	Sun	(Departing Dushanbe by KC132)			Expert leaves
	17	Mon	(Arriving in Narita)			

*T.C.: Training Center of TAN, FPO : Flight Procedure Office of TAN

Report on Activity

General:

TF and Activities	Taskforce-3, FPD, Activity 3-5
Title	Observation for FPD in DYU, and FPD-QA Training & W/S
Terms	29 August - 14 September 2018, 9:00-16:30 (12 days), and 5-7 for QA training in part
Type	Observation, Training and Work shop
Expert	Atsushi YAMANE

Lists of participants:

Name	Position	Daily attendance	Training abroad	Certificate
1. Mr. Sheraliev Bakhtiyor	Head of QMS	Attended 100%		Certificate Attendance
2. Mr .Rasirov Anvor	QMS	Attended 10%		fail
3. Mr .Gafarov Bakhriddin	QMS	Attended 100%		Certificate Attendance
4. Mr .Tadzhibaev Akbardzhon*	ATC	Attended 80%		Certificate Attendance
5. Mr .Kuliev Ilhom*	ATFM	Attended 30%		fail
6. Mr .Mubashirov Chorshanbe*	ATC	Attended 80%		Certificate Attendance
7. Mr .Shamsov Khabib	QMS	Attended 10%		fail
8. Mr .Stolov Yura	ATFM	Attended 10%		fail
9. Mr .Gamariddini Sh	QMS	Attended 10%		fail
10. Mr .Habibullo Shamsov	ATFM	Attended 10%		fail
** Only 3 of them*	*FPD team*	*Attended 100% for FPD observation*		*out of certificate*

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up,
This activity is designed to observe that CP namely FPD team are doing additional FPD works in Dushabe airport appropriately., and conduct FPD-QA training and W/S. FPD Expert conducted as below; 1) To instruct or advise the design of STAR connecting ILS approach from North and West. 2) To instruct or advise as CP additional request the design of MVA chart which is newly constructed for Dushabe airport approach control area to follow PANS-OPS rule over terrain obstacle, 3) To lecture an outline of FPD Quality Assurance such as general concept of Instrument Flight Procedure (IFP) development process, abstract of FPD-QA manual , validation method and training program, 4) To instruct and advice for CPs to make up original procedures of QA and GV with materials on W/S, 5) To review the practice and result of GV on W/S concerning FPD for Dushanbe airport such as STAR, SID and Non-precision approach procedures etc. which were designed and documented by FPD, 6) To review and summarize all profress of FPD activity through PJ. # *To organize SAR/RCC operation manual completion seminar was canceled due to delay of prparation.*	Participants have attended so as their duties as FPD team proceeded on design works and QMS personel lernt FPD procedures and QA method appropriately. Expert has recognized CP's outputs through each case of input as below; 1) FPD team has designed STARs connecting ILS RWY27 approach by straight courses from north point of NDB (SX) and west point of NDB (PR) on proper PANS-OPS criteria,. 2) FPD team has constructed draft MVA chart to be set on the range of terrain appropriately on PANS-OPS criteria, 3) Expert has lectured an outline of FPD-QA with brief memo, such as general system, designer training and validation method through ICAO Doc 9906, FPD QA manyual vol.1, vol.2 and vol.5 to have participants understood basically. 4) QMS personel has understood concept of FPD-QA and designer training requirement to arrange FPD audit method, and FPD team has made up basic process and forms for assurance of FPD and specially GV and checklist, 5) Expert has recognized that CP can conduct proper GV with rational procedure and effective checklist, and additional outputs of FPD in DYU might be finalized, and 6) Expert has reviewd all activities of FPD concerned step by step and proposed for CP to develop own style of FPD or IFP process with a manual or instructions, and maintain IFP quality and designer's competency..	FPD team and QMS team should cooperate each other to establish regular procedures of FPD-QA and GV by a final evaluation of PJ in the next October. Expert will review their outcomes and follow-up establishing FPD businessin TAN, accordingly.

List of Presentation Material and Handout (Available in web-site)

Schedule and contents (final)
Outline of FPD-QA & GV
Draft of GV/design review checklist for FPD, and Result of preliminary GV for new STAR, outputs of FPD in DYU
*Quality Assurance Manual for Flight procedure Design Volume 1 (Flight Procedure Design Quality Assurance System), Volume 2 (Flight Procedure Designer Training) and Volume 5 (Validation of Instrument Flight Procedures)
*PANS-OPS volume II, the sixth edition and amendment 7 *they are reference only, not in Web-site

Questions & Answers:

Question by P(Participants) / E(Expert)	Answers	Status
P) How to prove the achievement on training,	E) In QA manual vol 2, designer training, the standard of training program is shown with course content, required competency and method of evaluation. We can adapt the outcomes of our activity through PJ to those standards	Understood
P) How to adjust local style on QA method to QA manual or PANS-OPS, such as GV style or a roll of CAA.	E) The important factor of QA is to verify items on the list which are adjusted to local style or condition, and GV should be always conducted with arranged but designated procedures even though CAA is organizing the process.	Understood

The criteria for the issuance of certificates (if any)

For FPD-QA training and W/S, the certificate attendance is issued for 4 participants, 2 ATC officers and 2 QMS officer (Target persons).
[Criteria]

- Class attendance of 70%+, because some participants was assigned to the shift work.. FPD-QA training was shortend as only 3 days to provide only lecture and small W/S and excluded for the evaluation by SKA(Skill, Knowledge, Attitude), because it is anomalistic course in comparison with a normal ICAO training couse.

What participants have learned

- To design additionally 2 STAR connecting ILS approaches in Dushanbe airport with proper documents enough to be evaluated on ICAO PANS-OPS (Doc 8168) and Quality Assurance Manual for FPD (Doc 9906), - observation for FPD,
- To produce draft MVA chart based on PANS-OPS criteria and terrain or obstacle conditionand ATC operational view, - observation for FPD
- To understand outline of FPD-QA manual, general quality assurance system and basic method of GV, as well as to produce TAN's style of document form and GV method with checklist form in part for STAR,
- To review all process of FPD through this PJ and examine the outcomes so appropriately as to establish the basic style and method of IFP process in TAN, and recognize works remained to complete all FPD packages for Dushanbe airport or other airport.

Summary of evaluation questioner by participants

Question	Average of Result (Low 1- 5 High)
1. How would you rate the usefulness of the content?	4.0
2. How would you rate the hands-on activities?	4.3
3. How would you rate the instructor's knowledge in the subject?	4.3
4. How would you rate the instructor's style for teaching?	4.3
5. How would you rate the pace of the presentation or ractice?	Just right
6. Was the hands-on activity above or below your current skill level?	rather 'Above'

7. What did you like best or find most useful about the presentation or practice?
   Working with latest documents, Doc 9906 ICAO Quality Assurance Manual,
8. What skills did you learn that may help prepare you for FPD technical integration in the class?
   Preparing our own checklist to use now and future, preparing checklist and using it,
9. Were your personal learning goals for FPD activity or FPD-QA course met? If "No," please describe those expectations that were not met.
   Yes, we try to do, it is not so sure but we try to do it by our FPD group.
10. Any other comments?
    Much thanks for JICA, to assist, support and teach special task..

Conclusion and Recommendations

- 3 designers of FPD team conducted to design 3 STAR(arrival route) connecting to ILS RWY27 approach under Expert observation and advice and completed drawing procedures on a paper, making design description and drafting chart. These are urgent and effective to set ILS RWY27 approach in well operation. The independent design review for them were also conducted appropriately with a trial checklist

- MVA Chart drafting which were transferred from TF-1 is almost completed to accommodate to terrain obstacle. it should be returned to TF-1 and modified with operational requirement,

- Concerning FPD-QA Training& W/S, the structure, points of ICAO QA manual were lectured, specially it is essential to proceed on understanding of IFP process and validation process with method. TAN tried to introduce FPD-QA system with GV soon due to implementing ILS approach procedure and new STAR, but it may establish independent design review soon and fix design description form as well as validation method with checkilist as their style,

- IFP designer and QMS staff should understand to address FPD-QA system, specially data acquisition including requirement of stakeholders, design, documentation and validation are most important process and establish original methode or procedure of TAN. The design review should be conducted adequately by TAN's style, but the pre-flight validation may be committed to airlines or other organizations with listing-up significant points of validation in relation to flight operation matters,

- At last, we reviewed the activities of FPD series and outputs during PJ, and recognized that they were basic level, from now on, to develop FPD system in TAN, it is important to establish the strategic approach such as modification of IFP process in TAN, FPD system, designer training and maintaining quality of their performance more adequately.