AERONAUTICAL TELECOMMUNICATION NETWORK PANEL (ATNP) Working Group 3 -- Applications and Upper Layers Eighth Meeting October 1996 Alexandria, Virginia USA

I. Administrative Items

Mr. Ron Jones, the U.S. panel member and host for the working group meeting, welcomed the group and discussed arrangements for meeting support. He indicated that the FAA had provided a support room with PC and photocopy services.

II. Meeting Report

1. Approval of the Agenda

Mr. Jones introduced the agenda. With the minor addition of sub-agenda items under agenda item 7, the agenda was approved.

2. Review and Approve Report of the Seventh WG3 Meeting (Munich)

Mr. Jones introduced WP8-2, the report of the seventh meeting of WG3. A few minor corrections were noted and the meeting approved the report with the indicated changes.

3. Review inputs received from other ATNP working groups and other ICAO bodies

Mr. Calow reported on the WG1 and JWG meetings in Halifax that took place the end of July and beginning of August. He reported that Part 1 and Sub-Volume of the draft ATN SARPs were completed and have been submitted to ICAO. WG1 also approved the Planning Implementation Guide (PIG). He reported that 18 people attended the Halifax meetings. The papers on Security, Systems Management, Lexicon and Addressing were reviewed and approved as standing documents. The working paper from WG1 on proposed future work program (beyond ATNP/2) was reviewed and approved. A recommendation was also proposed to ATNP/2 that the meeting report from ATNP/2 should be offered under a Blue ICAO cover as a salable report.

Mr. Asbury then presented paper 8-28, a brief report of the ADSP/4 paper. The paper noted that IATA presented a paper on compatibility of FANS and ATN systems. The IATA paper then narrowed its recommendation to returning to the MOPS message set. The ADSP then offered that the FANS implementation be expanded to the CNS/ATM message set. Mr. Asbury noted that the IATA paper was not formally presented, which made discussion somewhat difficult. Mr. Snively indicated that the completed IATA paper would be presented at the Alexandria WG3 meeting. Mr. Asbury then briefed the emerging discussions on the questions of data link vs. automation accuracy (that the data of the ATIS message is actually different). The ADSP then discussed the meaning of the Roger message. Annex 10 now reads 'received', while ADSP understands 'received and understood'. The 24-bit ICAO ID was also accepted into Block 18 of the flight plan. The communications priority of ADS CPDLC at 11, with FIS possibly as high as 10. Under future work, MET work and air-to-air ADS-B were strongly recommended. Mr. Asbury then spoke of the future work plan. WG-A will undertake ADS, ADS-B, FOM for ADS-B. WG-B will look at other data link applications. They are also to work RCP and CPDLC upgrades. WG-A is to meet 2-3 week Jan 97, WG-B 3-4 week Jan 97 in Atlanta. Mr. Jones then queried the conveyance of ADSP/4 operational requirements to ATNP/WG1. Mr. Calow indicated that the requirements flow was in place. Mr. Calow then asked if the ADSP Manual were available. Mr. Asbury responded that the Manual was not available, being under ANC review.

4. Review Status of Submissions to ICAO and Plans for ATNP/2

WG3 reviewed the status of the move by ICAO. The new address for ICAO is 999 University Street, Montreal, Quebec, H3C 5H7. ICAO is actually beginning two Panels the week of ATNP/2. The status of submissions out of

the Halifax joint working group meeting were reviewed by Mr. Calow.

5. Subgroup Reports

5.1 Chairman's report on SG1 progress

Jean-Yves Piram discussed the work accomplished by SG1 at its meeting in Toulouse 23-27 September 1996. Work was accomplished on ATSMHS SARPs, v2.0a, ATSMHS Guidance Material, and AIDC SARPs. The group also worked on the Validation Report covering activities towards each validation objective. The operational requirement to capture non-flight-correlated messages was perhaps not correctly expressed. This led to a discussion of the utility of sequence numbers. The establishment of a single transport connection per flight was felt to bean operational burden; M. Piram pointed out that current ULA work would obviate this difficulty with the next addition of ACSE. M. Piram then indicated that the Halifax paper differed from the SG1-approved Munich paper. As this could not be currently be changed in ICAO, the changes would be given in the paper presentation at ATNP/2.

M. Piram then advanced the view that the OLDI transition to AIDC necessitated that OLDI be changed to manage that transition. Only a limited validation exercise has been performed on AIDC. The AFTN-ATN gateway ops concept will be presented in Alexandria. The ICC material presented some difficulty for the future work plan. The next SG1 meeting is scheduled for xx-xx January 1997 in the xx.

5.2 Chairman's report on SG2 progress

Mr. Asbury reported on SG2 progress. The group held one meeting 26-30 August 1996 in Silver Spring. The group first adjudicated Defect Reports. Mr. Asbury pointed to the new contribution of Mr. Norman Goodacre (US) who was able to read the SARPs without being a charter SG2 member and raise some interesting defects. Mr. Asbury sought guidance on the use of Sub-Volume-specific definitions. In the validation effort, SG2 defined required levels of validation, since certain requirements can be successfully validated at levels short of interoperable implementations. The group also defined the generation of guidance material. The Guidance Material is keyed to chapters, and oriented to implementers. The next SG2 meeting is scheduled for 16-20 December 1996 in the UK.

5.3 Chairman's report on SG3 progress

Mr. Van Trees reported on SG3 progress. The group held one meeting 24-26 September 1996 in Toulouse. The meeting worked chiefly on resolution of post-Munich defect reports, some 32 in number. SG3 agreed resolution of the DRs, and published both detailed change requests, and an unofficial 4.1 ULCS SARPs. The group then reviewed implementation reports as input to the ULCS validation report. SG3 then fundamentally edited the guidance material, eliminating much historical material, in favor of actual implementation guidance. Mr. Van Trees then indicated that the ISO efficiency enhancements which underpin the ULCS have progressed to DAM status. Mr. Van Trees then briefly alluded to future SG3 work, to include the next edition of ACSE, as well as the upgrade of CMIP to ASN.1:1994 over an ATN profile. The next SG3 meeting is scheduled for 16-20 December 1996 in the UK.

Mr. Van Trees reported on another implementation from SISCO (Herb Faulk) which implemented ACSE/FB/PER/TP4/CLNP for utilities work in the Northern US. The implementation runs in about 25k bytes code size

6. Review Validation Report Status and Reports of Validation Results

Mr. Moulton presented WP8-31 providing information of FAA's plans for validation of the air-ground application SARPs. It was reported the FAA has recently changed it approach to a-g application validation and now plans to complete prototyping and testing of all four air-ground applications and be in a position to report results by the working group of the whole meeting in late Feb. or early March 1997. There are plans for interoperability testing with Eurocontrol in Feb. 1997

Mr. Van Roosbroek and Mr. Valentine jointly presented WP8-23 on the Eurocontrol Validation Report for CNS/ATM-1 Package SARPs. He summarized EC plans for both modeling as well as prototype implementations and testing. He reported that is validating Upper layer communications service as well as the CM, CPDLC and ADS air-ground application SARPs. The EC activity will address the validation of the FIS application only to the level of inspection and analysis. It was reported that simulation models are already developed and initial validation results have been obtained for ADS and upper layers (air and ground elements). This prototypes will be used for internal

testing beginning in December 1996 and interoperability with the FAA developed prototype is planned to begin in January 1997.

Mr. Calow provided Flimsy 8-1 and 8-2. The first flimsy proposed the appendix structure for submission of the proposed SARPs changes to ATNP/2. These would be associated with a covering WP that was submitted to ICAO as an outcome of the Halifax JWG meeting in August 1996. The second was a matrix showing the relationship of operational requirements and institutional requirements (from ADSP and FANS-II) to the SV-1 system level requirements.

6.1 Review Validation Report Structure

Mr. Calow offered to present the mapping of SV1 "shalls" to the individual Sub-Volumes. Mr. Van Roosbroek questioned the level of detail necessary for ANC presentation. The group then agreed to review the ADS application as the paradigm for the validation report.

6.2 Review Basis for Recommendations to ATNP/2

Working papers on this topic had been reviewed and approved at the seventh meeting of WG3. Since the draft validation reports submitted to WG3 for review were consistent with this previously agreed approach no working paper or flimsies were reviewed under this agenda item.

6.3 Air-Ground Applications

Mr. Asbury led a discussion of WP 8-14, the ADS report. The document contains the Munich Validation Objectives (System, Functional, and Technical). The validation means span interoperating implementations to analysis. The report then moves to discrete technical objectives (a demand contract, an event contract). The report details validation against the technical objectives. Mr. Jones suggested that a cumulative column be added. The report then concludes with analysis of the level of validation.

WG3 agreed that the individual shall database was appropriate for states and organizations to report their efforts to the WG3 rapporteur. The WG3 rapporteur would then report at a higher level to the ANC. The WG3 rapporteur then gave guidance to the editors to place notations of future plans in brackets after the present notation.

Mr. Asbury then presented WP 8-12, the CM validation report. Mr. Jones questioned whether the validation might be better broken down by functional allocation. There is one subset on the aircraft and twenty-eight functional subsets on the ground. The validation document would then have to prove that the functional allocations were collectively exhaustive of the requirements. Section 4 is specific to each air-ground application.

Mr. Jones then raised the question of whether the validation report should reflect the Panel edition (ex-Munich) or rather the validation should reflect the latest WG3 edition, forward changes, and/or preceding changes.

Mr. Asbury indicated an intent of SG1 to develop a matrix reflecting the desired level of validation for each VO listed in validation reports of each air-ground application. The working group concluded this information should be maintained as an internal WG3 document and not included in the validation report being submitted to ATNP/2.

There was considerable discussion on the need to include, in the validation report, a description of the validation environments and tools being used by each organization supporting the validation efforts. IT was concluded that a brief description of this, on an organization by organization basis, should be included in the validation reports. Organizations supporting ATN SARPs validation were requested to provide brief text that could be added to the validation report. The applies to each of the validation reports.

Mr. Asbury presented WP8-15, the FIS draft SARPs Validation report. The format was the same as for the ADS validation report. It was noted that section 5 needs to be cleaned up to remove text that could possibly be viewed as promoting a specific commercial product. The WG agreed that the report needs to incorporate the equivalent changes in scope as indicated as applying to all application SARPs validation reports.

Mr. Asbury then introduced WP8-13, the CPDLC draft SARPs validation report and ask Ms. Hamelink to present the paper. She noted that because CPDLC SARPs has a more extensive chapter 7, the CPDLC validation report has a greater number of groups of 'shalls' corresponding the greater number of functions. The WG agreed that the report needs to incorporate the equivalent changes in scope as indicated as applying to all application SARPs validation reports.

6.4 Ground-Ground Applications

Mr. Vacher presented WP8-5, the ATSMHS Draft SARPs Validation Report. He indicated that the format of the report was patterned after that used for the ADS SARPs Validation Report. He noted the reports reflects credit for the use of protocols conforming to base standards. The report included, in section 4, the validation achieved by states and organizations. Both partial implementations and inspection and analysis were reported for major areas of the validation level for major functional areas of the ATSMHS SARPs. It was noted that section 5 of the draft report includes the desired validation methods for each VO. As was discussed under the context of the validation reports for the air-ground applications, this material should be removed from the validation report and maintained as documentation internal to WG3.

Mr. Piram presented WP8-8, the draft AIDC SARPs validation report. The draft report was prepared by Mr. Leclerc. The paper followed the same format as the draft validation report for the ATSMHS SARPs (WP8-5). The reported validation status take credit for an ongoing activity in Europe that is similar to ICC (i.e., On-Line Data Interchange - OLDI)

The AIDC and ATSMHS draft validation reports included table summarizing the validation objective achievement. It was decided to not include this table for the report submitted to ATNP/2. However it would be useful for the report to the working group of the whole meeting in early 1997.

6.5 Upper Layer Communications Service

Mr. Van Trees presented WP8-20, the upper layer SARPs validation report. He indicated that results from the FAA and PHARE upper layer validation efforts have not yet incorporated into the report. He indicated that he hoped to provide the working group with an updated copy during the course of the WG3 meeting. SG3 used the ADS SARPs draft validation report as the basis for developing the format of the upper layer validation report. The report recognizes the use of external (to ICAO) base standards within the ATN SARPs. As with the application SARPs validation reports, the upper layer SARPs validation report defines validation objectives and the grouping of requirements by function. Section 4 reports the validation activities undertaken by the States and Organizations (needing update to bring up-to-date). The results of the validation activities are reported along with analysis and conclusions against the validation objectives.

6.6 Breakout sessions to progress validation report

Working Group 3 held three concurrent breakout sessions on Wednesday, 9 October 1996. The three sessions revised the draft validation reports based on the comments received during the previous WG3 reviews under agenda items 6.3, 6.4 and 6.5.

M. Piram reported that the AIDC validation report offers a summary of validation activities. All the requested validation summaries are TBD for the end of the meeting. He reported that M. LeClerc, the SARPs editor, will soon be in Bruxelles and update the validation report.

Mr. Asbury reported that SG1 and SG2 had coordinated on the format of their respective validation reports. The subgroup produced two output documents. Flimsy 3 is a report on the breakout meeting. WP8-12, rev1 is a revision of the CM validation report. Mr. Asbury noted that Hughes Canada are undertaking an implementation of ATN applications. He asked for guidance on inclusion of industry as opposed to state/organization validation activities. Mr. Asbury indicated that the means of validation would be suffixed to each VO. M. Camus indicated he was looking for a statement that the applications were independent of each other. He indicated that Aerospatiale intended to develop and certify the applications separately for simplicity and future enhancement. Mr. Jones indicated that the place for such a statement was in Sub-Volume 1. Mr. Jones indicated that the applications were required independently in Sub-Volume1, except that context management be implemented if any other application were.

Mr. Van Trees reported that SG3 had met and produced a revision to WP8-20. The revision to WP8-20 included new material on PER standard validation, US upper layer validation activities, and updates of general VO results.

M. Piram then posed several general questions. Should the defect report list be an exposed interface? Should the validation report be ongoing indefinitely? Should the term CNS/ATM-1 be carried in the report? Mr. Jones indicated that the validation report be a final deliverable to the WGOW, and could be confined to CNS/ATM-1. Mr. Asbury indicated that validation would certainly continue after WGOW, and he wished for a contactfor on-going reports. Mr. Calow questioned the mode of working of the SGs. Mr. Asbury indicated that the group submitted

hard-copy changes pages against ICAO WordPerfect Halifax text, while the SG continued to word in Word. Mr. Calow indicated he expected an eventual requirement for soft-copy change pages.

7. Review any Proposed SARPs Defects and Proposed Corrections

7.1 Air-Ground Applications

Mr. Asbury introduced the air-ground applications defect register. He pointed out the need for on-going validation through the continuing process of correction, and incorporation of new operational requirements. Mr. Asbury indicated that e.g., the change from 'altitude' to 'level' caused 178 messages to change in CPDLC, such that the CPDLC SARPs changed on all but three pages. The other air-ground applications underwent minor changes that are shown in a change paper.

Mr. Asbury introduced WP8-16, WP-8-17, WP-8-18 and WP8-19 proposing corrections to each of the 4 air-ground application SARPs. All defect reports submitted against the four air-ground application draft SARPs have been closed, or rejected. Mr. Saccone presented WP8-16 on proposed corrections to the context management application SARPs. He pointed out the more substansive changes. A number of the proposed changes were of the nature of clarifications to the draft SARPs. Only a relatively few of the changes reflect technical changes. Changes to respond to inputs from the ADSP/4 meeting are included.

Ms. Hamelink presented WP8-17 that summarized the changes proposed against the CPDLC SARPs. Most pages of the SARPs are impacted by the proposed changes as certain changes of terminology are repeated many times thoughout the draft CPDLC SARPs. Many of these changes results from inputs received from the ADSP/4 meeting. There have been a very few actual technical defects that have been indentified and for which corrections are proposed. Several non -testable requirements are proposed to be deleted (from section 5 for each of the four airground applications SARPs). Based on inputs from ADSP/4, the communications priority level for both CPDLC (and ADS) was increased by one level (resulting in a CLNP priorty level of 11 instead of 10).

Mr. Asbury presented WP8-18 that proposed corrections to the ADS draft SARPs. The majority of the defect reports, and proposed corrections against the ADS draft SARPs were also common to the other air-ground applications SARPs. There were also a number of proposed editorial changes. There were also a number of technical changes proposed. The proposed change account for inputs received from ADSP/4 on terminology, and the ranges, resolutions and limits of parameters. All changes were presented as original text, proposed revised text and then a red-lined version of the original text to incorporate the proposed change. The document will be revised to only present the red-lined version of the proposed changed text.

Mr. Asbury present WP8-19 that proposed corrections to the FIS draft SARPs. There were very few proposed changes the majority of which were editorial. Based on inputs from ADSP/4, the communications priority level for ADS was increased by one level (resulting in a CLNP priorty level of 11 instead of 10).

Mr. Burgemeister present WP8-30, on industry concerns regarding the ATN SARPs. This is presented as an information paper to WG3 and represents a WP for ICCAIA, represented by Mr. Burgemeister, to ATNP/2. He focused on the recommendation that the CPDLC and ADS SARPs maintain backward compatibility with DO-219 and DO-212 as well as ARINC Characteristic 745 to the maximum extent possible. Mr. Burgemeister acceded to the need for updates based on genuine user requirements. This working paper was discussed again later in the meeting. Mr. Burgemeister pointed out that his concern was related to only those changes for which there did not seem to be obvious reason why there was a divergance from what was done for FANS-1. This specifically related to the definition of parameters and the range and resolution of the units. Mr. Asbury responded that this was primaritly an ADSP issue since the definition of the parameters originated with that panel and the ATN SARPs editors have conformed to what was defined by the ADSP. Generally the ADSP defined the parameters to accommodate the units used by the various ICAO States as well as to conform to existing ICAO definitions. In some cases these differ from that defined for the FANS-1 applications. Also since the ATN applications over a upper layer service (the dialog service) this resulting ASN.1/PER encoding (transfer syntax) will be different from that defined for FANS-1 applications operating over a non-standard transport protocol.

Mr. Snively presented WP8-22, on IATA recommendation on backward compatibility. He explained that IATA fully supports the ATN (Package 1) and the need to finalize the ATN SARPs coming out the planned early 1997 working group of the whole meeting. He explained the motivation behind the working paper was to increase support for ATN by having ICAO define a clear migration path from FANS-1 to ATN Package-1. The working paper represents a draft of what IATA plans on submitting to ATNP/2. The paper proposed that ICAO defines 3 basic scenarios on how a transition from FANS-1 to ATN could occur. A bilingual scenario would allow bilingual aircraft to operate in both FANS-1 and ATM environments. The second scenario type involves the use of dual

stacks. Two variations of the dual scenario were presented. The variations cover having the ATN ground end systems having to support dual stacks and alternatively having service providers provide the dual stack support. The third general scenario is a 'one specification' scenario. In this scenario the FANS-1 aircraft upgrade to ATN. It was pointed out by Mr. Asbury and Ms. Hamelink that the ATN applications are not supersets of FANS-1 in that the none of the encoded messages are the same. Mr. Jones suggested that since the North Atlantic is the area of concern as FANS-1 aircraft may desire to operate in the NAT where ATN services are expected to be operational starting in 1999. He further suggested that perhaps IATA needs to resolve the transition path through coordination with the regional planning group for the NAT as the two most like solutions would be either for the CAA to support ground FANS-1/ATN gateways or for the FANS-1 aircraft to support dual implementations or gateways. WP8-22 was discussed again later in the working group meeting.

Since both working papers on FANS-1 to ATN transition are aimed at ATNP/2, the working group did not attempt to resolve the issues raised by working papers 8-30 and 8-22. There was a general recognition that FANS-1 and ATN ground system and aircraft will co-exist within the global ATS environment during an possibly extended period. The group recognized this creates transition issue that need to be addressed. After considerable discussion the consensus of the working group is the ADSP and/or the regional planning group should be taking the lead to decide if, or how, to address the FANS-1 to ATN transition issues. Mr. Snively indicated that the IATA would be updating their working paper for submission to ATNP/2.

7.2 Ground-Ground Applications

M. Vacher briefed the change proposals accepted by SG1 for the ATSMHS. The ATSMHS changes are a result of consistency checks with the other Sub-Volumes, industry comment, and simplification of ATSMHS reporting requirements. Approximate 30 paragraphs of the ATSMHS SARPs are effected by the proposed changes. The change paper was updated and distributed as Flimsy 7. The proposed changes were put in the form of strike out and underline for insertions and deletions showing only the paragraphs for which there were changes. The only needed changes identified by the working group were related to the information to be included in the header and footer as well as the title. Specifically the header was to be deleted, the footer was to be changed to only contain the subject (i.e., ATSMHS SARPs change pages) and the word 'draft' was to be deleted from the title.

M. Piram discussed the change proposals accepted by SG1 for the AIDC application. The changes result from SG1 review and an SG1 meeting with ADSP operational experts.

M. Vacher led a point-by-point review of the change proposals. He indicated that only one Defect Report was still open. If an ATSMHS message is undeliverable, then a non-delivery message is generated. If the message was converted at a gateway, there is no equivalent message for the gateway to notify the originator of the message of non-delivery. The message is not retained at the gateway, since it was properly converted. The solution to the problem should be forthcoming in side discussions during WG3. M. Vacher undertook to produce a change list for the ATNP/2 meeting.

Mr. Jones indicated that the status of Guidance Material was to be discussed after the SARPs status.

M. Piram introduced WP8-7 describing the proposed changes to the AIDC SARPs. There were three significant changes to the AIDC SARPs proposed. There were a small number of errors that needed to be corrected. There were changes derived from comments of ADSP operational experts. There were also recent inputs from the ADSP causing needed updates to the AIDC material. The detailed review was deferred to later in the meeting.

7.3 Upper Layer Communications Services

Mr. Van Trees discussed the change proposals against the upper layer draft SARPs as outlined in WP 8-21. The changes are mainly formal in nature, for clarity in requirements. There were a number of technial defects among the 32 defects presented in the working paper.

Mr. Van Trees introduced WP8-27, an information paper on the status of the ISO upper layer efficiency enhancements standards. He reported that the work within ISO is essentially complete. The comments to the draft standard have been received by ISO and all of the comments are editorial in nature. Since the ISO standards are now believed to be technically correct, there is no longer a need to carry any defect information, against the base standards, in the ATN upper layer guidance material.

8. Guidance Material

8.1 Air-Ground Applications

Mr. Asbury reported on the status of the Guidance Material for the air-ground applications. He indicated that little drafting had taken place and no Guidance Material was ready for presentation to ATNP/2. He indicated that the development of the air-ground application Guidance Material is just beginning and will probably will not be completed by the time of the planned working group of the whole meeting in early 1997. However, he indicated he expects to have some Guidance Material ready for review of the working group of the whole meeting in early 1997. Mr. Asbury indicated that WP8-32 described the plans of SG2 to develop the Guidance Material for the air-ground.

8.2 Ground-Ground Applications

Mr. Piram indicated that the ATSMHS Guidance Material is relatively complete however the ICC Guidance Material is in the early stages of development. The ICC draft Guidance Material was not reviewed by the working group. He indicated that the guidance material will not be mature enough, nor complete enough, to proposed to ATNP/2 for approval. He indicated that the ATSMHS Guidance Material could be ready by the working group of the whole meeting in late Feb. or early March 1997. Mr. Vacher lead the working group through of the draft ATSMHS Guidance Material and pointed out the areas that had changed since the WG3 meeting in Munich (June 1996) and also pointed out the changes that still need to be make to align with the most recent draft ATSMHS SARPs.

Mr. Jones suggested that perhaps a recommendation could be submitted to ATNP/2 to convene a second working group of the whole meeting in the Sept.-Nov. time frame. At this body would be authorized by ATNP/2 (and the ANC through approval of the ATNP/2 report) to approve Guidance Material (a complete package) and to review the comments/defected received by the ICAO States against the ATN SARPs to propose corrections to the ATN SARPs. The second working group of the whole meeting should be convened within 60 days after the close of the state comment period for the ATN SARPs. Mr. Jones offered to prepare a Flimsy for coordination with WG1 and WG2 and the JWG on the subject. This flimsy is reported on under agenda item 12 below.

8.3 Upper Layer Communications Service

Mr. Van Trees presented an overview of the Guidance Material for the upper layer communications service. He noted the Guidance Material is generally complete. However it needs additional editorial work to align with the current draft SARPs as well as align with the latest editions of the ISO standards. In responding to a question from Mr. Jones, Mr. Van Trees indicated that the upper layer Guidance Material could probably be matured for approval at the working group of the whole meeting in Feb./March 1997. There were a number of specific comments against the draft Guidance Material. There was an agreement to reduce the details on suggested provisions implementor's could made to facilitate migrate to future editions of the ISO ACSE standard.

9. Review Progress on Validation Report

9.1 Review draft Recommendations to ATNP/2

Mr. Vacher presented the ATSMHS revised validation report. A need for a few minor changes were noted by the working group and Mr. Moulton agreed to provide brief description of the role of the U.S. DoD/NATO activities as related to indirectly supporting validation of the AMHS service.

Mr. Piram presented the AIDC (ICC) revised validation report. Section 5 was added, but no text was yet provided to briefly describe the validation activities of the organizations support the AIDC SARPs validation. He hoped to have inputs for this section during the course of the meeting. The working group provided no comments.

Ms. Hamelink presented the CPDLC revised validation report. Section 5 had been added with brief descriptions of the FAA and Eurocontrol validation activities. Only minor editorial comments were provided by the working group.

Mr. Asbury presented the CM revised validation report. Section 5 had been added with brief descriptions of the FAA and Eurocontrol validation activities. Only minor editorial comments were provided by the working group.

Updated versions of the ADS and FIS were not available review as this point in the working group meeting. Mr. Asbury reported that revised versions would be available for final review later in the meeting under agenda item 10.

Mr. Van Trees presented the upper layer communications service revised validation report. There were minor comments related to the organization of the material. An updated version was latter reviewed under Agenda Item 10.

10. Review Validation (final draft) Report

Mr. Asbury presented Flimsy 8-5 containing the updated validation report for the air-ground application SARPs. He noted that the CPDLC validation report table in section 4 stilled needed to be filled out in the summary column. The CM validation reported the shorten the text for the Eurocontrol validation summary of their activities while the other air-ground application validation reports included substantially more details. The group agreed to use the shortened form, with any additions needed to adequately reflect the scope of the Eurocontrol validation activities. Mr. Valentine agreed to work with Mr. Asbury on this. Mr. Jones accepted to provide additional text describing the FAA program. Mr. Asbury subsequently presented Flimsy 8-1 revision 1 contain the validation reports for the four air-ground applications. Mr. Jones noted that the references to working papers that has been submitted to the working group should be deleted from the validation report. However States and Organization may submit information paper to ATNP/2 presenting information on their validation activities that are similar to the papers that were referenced. The group agreed that the references should be deleted. Mr. Vacher noted that the term CM and CMA has been used interchangeably. After some discussion it was agreed the term should be CM. The working group approved the validation reports for the air-ground applications with the minor editorial changes noted.

Mr. Piram presented WP8-8b, the draft AIDC SARPs validation report. He noted that head, footer and titles would be changed to a format consistent that that adopted for the other validation reports. He noted that he is still awaiting inputs from AirServices Australia and from the Leclerc of Eurocontrol. I will attempt to contact Mr. Pearce of AirServices to see if any information is available and he has already contact Mr. Leclerc and will expects additional inputs. Mr. Piram indicated that he would include any inputs received as of the final day of the WG3 meeting and the reviewed again at that time. Mr. Piram subsequently presented WP8-8c and flimsy 8 representing updated material for the AIDC validation report and a revised section 5 of the validation report respectively. There were a few minor editorial comments from the working group and Mr. Piram was authorized by the working group to make the agreed to editorial changes and to issue the final version of the AIDC validation report for presentation to ATNP/2. It was noted that the AIDC validation report does not include a listing of defect reported against the version of the SARPs submitted to ICAO after the Munich working group meeting.

Mr. Vacher presented Flimsy 8-10 containing a revised ATSMHS SARPs Validation Report. He pointed out the changes made from the previous version. He pointed out that the table indicating the validation activities and achieved levels of validation by the various States and Organization had been substantially filled out since the previous version of the report. He noted that the defect that was previously reported as open has now been closed based on discussions between the SG1 members and the resulting proposed resolution included in the proposed changes to the SARPs. He also noted that a review of the draft SARPs by the SG1 members detected a few additional defects, all editorial, that have now been include in the list of defected. All of the defects are considered closed since the proposed changes (flimsy 8-9) address all of the defects. Mr. Piram suggested a revision in section 5 to report that planned development in Europe of production ATSMHS systems. Since these developments would not occur until after the working group of the whole meeting in early 1997, Mr. Jones suggested that the validation status from these activities be indicated as of first quarter 1997 as well as the later date already included in the draft report.

Mr. Vacher presented Flimsy 8-9 providing the updated change proposal to the ATSMHS SARPs. This revised version of the proposed changes included the changes needed to close the one open defect report that had previously been reported to the working group. The group provide a few editor comments. The proposed changes were accepted by the working group.

Mr. Van Trees presented revision 2 to WP8-20 containing the Upper Layer SARPs Validation Report. He indicated that the draft report had been modified as previously directed by the working group. The table presenting the validation activities summary had been completed indicating the level of validation by each organization for each group of requirements. Mr. Valentine had a minor comment on the title of the Eurocontrol TES project. Also it was noted that the validation means of 'f' (indication simulation activities) needed to be added in addition to category 'e' for the Eurocontrol TES project. There was a concern expressed by a number of the member on the length of the text describing the Eurocontrol sponsored validation activities since this seemed to be out of proportion to that provided for the other validation activities. Mr. Van Trees and Mr. Valentine were authorized by the working group to update the report for the final version as presented to ATNP/2.

11. Review final draft of Proposed Changes to ATN draft SARPs

Mr. Asbury presented Flimsy 8-6 providing the updated proposed changes to the CM SARPs. The material was presented in the form of strike-through and underline for the deletions and additions respectively. There was a minor comment from Mr. Valentine that the cross reference to 4. for the definition of the AE-Qualifier had not been

incorporated as previously agreed in the meeting. Mr. Asbury indicated he would include this change in an update to the flimsy.

Mr. Asbury subsequently presented flimsy 8-6 revision 1 containing updated proposed change papers for the CM and ADS draft SARPs. The changes were presented with stikethrough and underline for the deleted and new text respectively.

Mr. Piram presented WP8-7 on proposed changes on the AIDC SARPs. This was initially presented under agenda item 7. Proposed changes resulted from results obtained from compiling the ASN.1 from the AIDC draft SARPs and from inputs received from the ADS Panel. The working group agreed with the proposed changes

A potentially significant issue was raised that could impact the air-ground and ground-ground applications SARPs proposed changes. The proposed changes papers used the Word version of the SARPs as the basis of the proposed changes. ICAO was provided with both hard copies of the Word version as well as a hard copy and electronic files for a WordPerfect 6.1 version. In the process of migrating from Word to WordPerfect some paragraphs were renumbered. The panel secretary, at ICAO, had to be consulted to determine which version was being provided to the delegations attending ATNP/2. The editors were requested to review the WordPerfect versions of the SARPs and to verify that the referenced para. numbers are correct. If ICAO is providing the WordPerfect version to ATNP/2 then the papers proposing changes to the SARPs would need to be updated to include the correct references to the WordPerfect version of the SARPs. Also the subgroups were ask to perform a detailed review of the WordPerfect version of the SARPs and prepare change papers, as needed, for review and approval at the working group of the whole meeting in early 1997 to correct any problems introduced by the conversion from Word to WordPerfect. The panel secretary was to be consulted on these matters and the results of the discussion reported back to WG3.

Mr. Van Trees presented WP8-21 revision 1, containing proposed changes to the upper layer communications service draft SARPs. He noted the changes that have been made since the first version of this paper. A few editorial comments were received from the working group. The most significant was the paper presented the changes in the form of old text and new text rather than in strikeout and underline for new text and deleted text. Mr. Van Trees agreed to revise the changes paper to use the latter format for presenting the changes if possible within the available time.

12. Review draft Guidance Material to be submitted to ATNP/2.

After discussion by the working group on the status of the ATN Guidance Material (agenda item 8.2), Mr. Jones prepared flimsy 8-4 to be used as the basis of coordination with the other working groups. The flimsy proposed that the ATNP joint working group proposed to ATNP/2 that the Guidance Material is not ready for review and approval at ATNP/2 nor is it expected to fully complete and mature by the working group of the whole meeting scheduled for early 1997. The flimsy further recommended that the JWG propose that ATNP/2 approve a second working group of the whole meeting within 45 days after comments on the ATN SARPs are received from States. This is anticipated to be in the August to October 1997 time frame. This second working group of the whole meeting would be tasked with reviewing state comments to the proposed ATN SARPs, proposing changes to the ATN SARPs as necessary to respond to the State comments and to reviewing and approving the ATN Guidance Material. This meeting would then provide inputs back to the ANC via the panel secretary. The flimsy was revised based on the editorial comments received from the working group and distributed to the other ATNP working groups.

13. Any Other Business

Tom Kraft presented WP 8-29 and information paper describing the activities of the newly created RTCA SC-189/EUROCAE WG-53. This activity while focused on ARINC 622 based data communications for ATS also is producing material related to certification that is intended to be also applicable to the ATN.

The following meetings of the ATN Panel, working groups and Working Group 3 subgroups are planned.

ATNP/2 4-15 November 1996

Sub-Group 1 14-17 January 1997 - Location TBD

Sub-Group 2 16-20 December 1996 - Bracknell, UK

3-7 Feb. 1997 - Toulouse, France

Sub-Group 3 16-20 December 1996 - Bracknell, UK

Working Group of the Whole Late Feb./Early March 1997 (exact dates TBD)

The eighth meeting adjourned on 15 October 1996 at 16:15.

ATNP WG3 - Eighth Meeting

Draft Agenda October 7-15, 1996 Meeting Hours: 0830 until 1700

Monday, 7 Oct.

- 1. Approval of the Agenda
- 2. Review and Approve Report of the Seventh WG3 Meeting (Munich)
- 3. Review inputs received from other ATNP working groups and other ICAO bodies
- 4. Review Status of Submissions to ICAO and Plans for ATNP/2
- 5. Subgroup Reports
 - 5.1 Chairman's report on SG1 progress
 - 5.2 Chairman's report on SG2 progress
 - 5.3 Chairman's report on SG3 progress

Tuesday, 8 Oct.

- 6. Review Validation Report Status and Reports of Validation Results
 - 6.1 Review Validation Report Structure
 - 6.2 Review Basis for Recommendations to ATNP/2
 - 6.3 Air-Ground Applications
 - 6.4 Ground-Ground Applications
 - 6.5 Upper Layer Communications Service

Wednesday, 9 Oct.

6.6 Breakout sessions to progress validation report

Thursday, 10 Oct.

- 7. Review any Proposed SARPs Defects and Proposed Corrections
 - 7.1 Air-Ground Applications
 - 7.2 Ground-Ground Applications
 - 7.3 Upper Layer Communications Services
- 8. Guidance Material
 - 8.1 Air-Ground Applications
 - 8.2 Ground-Ground Applications
 - 8.3 Upper Layer Communications Service

Friday, 11 Oct.

- 8. Guidance Material (Continued)
- 9. Review Progress on Validation Report
 - 9.1 Review draft Recommendations to ATNP/2

Monday, 14 Oct.

- 10. Review Validation (final draft) Report
- 11. Review final draft of Proposed Changes to ATN draft SARPs

Tuesday, 15 Oct.

- 12. Review draft Guidance Material to be submitted to ATNP/2.
- 13. Any Other Business

LIST OF WORKING PAPERS

ATNP WG3 - Eighth Meeting - Alexandria, Virginia, USA, 8-15 October1996

No	Agenda Item	Presenter	Title
8-1	1	R. Jones	Agenda
8-2	2	R. Jones	ATNP WG3 Seventh Meeting Report
8-3	5.1	J. Piram	SG1 Chairman's Report to WG3
8-4	7.2	J. Piram	Summary of Defect Reports and associated change pages on draft ATSMHS SARPs
8-5	6.4	J. Piram	Draft ATSMHS Validation Report
8-6	8.2	J. Piram	Draft ATSMHS Guidance Material
8-7	7.2	J. Piram	Summay of Defect Reports and associated change pages on Draft ICC SARPs
8-8	6.4	J. Piram	Draft ICC Validation Report
8-9	8.2	J. Piram	Draft ICC Guidance Material
8-10	8.2	J. Piram	Overview of ICC SARPs Material
8-11	8.2		not used
8-12	6.3	M. Asbury	Draft CM Validation Report
8-13	6.3	M. Asbury	Draft CPDLC Validation Report
8-14	6.3	M. Asbury	Draft ADS Validation Report
8-15	6.3	M. Asbury	Draft FIS Validation Report
8-16	7.1	M. Asbury	Proposed Changes to CM Draft SARPs
8-17	7.1	M. Asbury	Corrections to Version 3.0 of the CPDLC SARPs
8-18	7.1	M. Asbury	Proposed Changes to ADS Draft SARPs
8-19	7.1	M. Asbury	Proposed Changes to FIS Draft SARPs
8-20	6.5	S. Van Trees	Draft Upper Layer Communications Service Validation Report
8-21	7.3	S. Van Trees	Proposed Changes to Draft Upper Layer Communications Service Draft SARPs
8-22	7.1	A. Snively	IATA Recommendation on Backward Compatibility
8-23	6	D. Van Roosbroek	Eurocontrol Validation Report for CNS/ATM-1 Package SARPs
8-24	5.3	S. Van Trees	SG3 Status Report
8-25	7.3	S. Van Trees	ULCS SARPs (4.1 unofficial)
8-26	8.3	S. Van Trees	ULCS Guidance Material

	1	(IP) ISO Efficiency DAMs
3	M. Asbury	ADSP/4 Report
	T. Kraft	SC-189/WG-53 Safety and Intereroperability Requirements for ATS
7	A. Burgemeister	Industry Concerns Regarding ATN SARPs
6.3	J. Moulton	Information on FAA'a Plans for Validation of the Air-Ground Application SARPs
5.2	M. Asbury	Chairman's Report of SG2
13	G. Anderson	Proposal to Complete the Performance Requirements of Sub-Volume 1
	6.3 5.2	T. Kraft A. Burgemeister 6.3 J. Moulton 5.2 M. Asbury

Flimsy 1	Appendix allocations for SARPs' validation reports and proposed changes
Flimsy 2	Tracebility of Operational and Institutional Requirements to System Level Requirements
Flimsy 3	Report of the SG2 Breakout Session
Flimsy 4	Working Group Recommendations to ATNP/2
Flimsy 5	Air ground validation report Appendics C thru F
Flimsy 6	Air-Ground SARPs changes papers to Version 3.0 - Appendix C
Flimsy 7	Change Pages to the ATSMHS Draft SARPs (superseded by flimsy 9)
Flimsy 8	Completion of AIDC Validation Report
Flimsy 9	Updated ATSMHS Change Pages
Flimsy 10	Updated ATSMHS Validation Report

ATNP WG3 Eighth Meeting - Attendance List

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