



AVIOTEX

TABS[®]

USERS

GUIDE

3158 Redhill Avenue, Suite 270, Costa Mesa, CA 92626
(800) 255-TABS

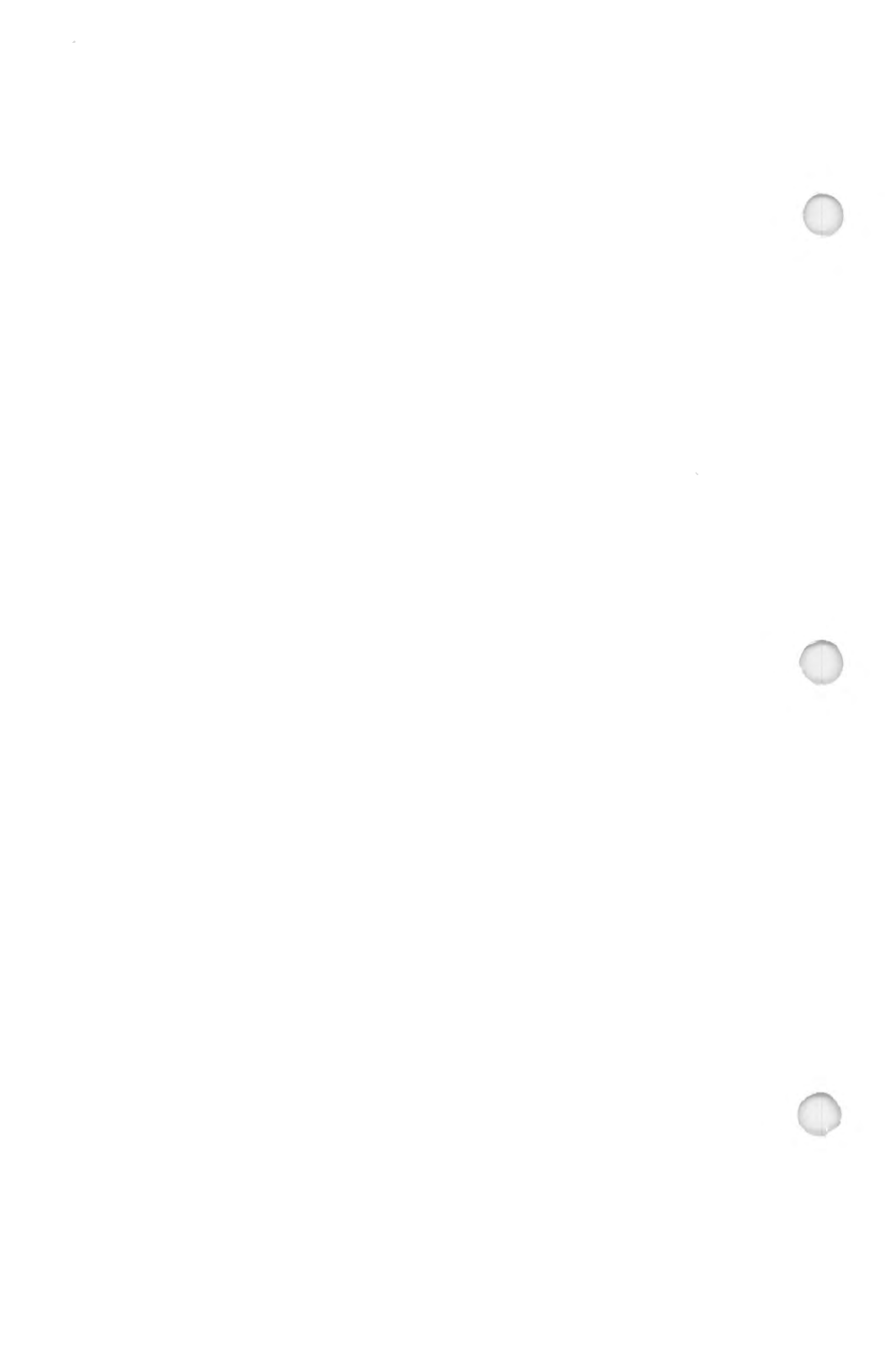


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**CAUTION
TABS
PROVIDES
CLASS 1
NOTAMS
ONLY**

IBM is a registered trademark of International Business Machines Corporation

Apple IIe and Apple IIc are products of Apple Computer, Inc.

The VANILLA Decoder is a trademark of Informart.

personality + III is a trademark of Microstar Software LTD.

VIDEOTEX Decoder II software is a product of Manitoba Telephone System.

Sceptre is a trademark of AT&T.

SOFDEC is a product of Formic.

PIZAZZ is a trademark of Application Techniques, Inc.

PREFACE

CUSTOMER SERVICE

1-800-255-8227

We'd like to take this opportunity to welcome you to the Aviotex /TABS (Total Aviation Briefing Service) and provide you with some tips to help you get the most out of using our many offerings. We know you are anxious to use the service, but if you would first spend the time to familiarize yourself with some of the basics, you will find it more rewarding.

TIP 1 - USER'S GUIDE

- * Use the enclosed TABS users manual. This manual is written to help you in using our service. You will find shortcuts which will save you time and money. The table of contents will help you in finding information on specific subjects.

TIP 2 - MENU & KEYWORDS

- * The TABS database is structured for both menu and "Keyword" usage. The menu structure will get you to the desired information. However, we suggest the use of the keywords listed in Appendix A. The keywords are designed to save you both time and money. TABS contains over 100,000 pages of weather information alone, each with a keyword. Keywords do save time. Please review Appendix E, for Pictorial Help.

TIP 3 - LOGGING ON (Sceptre user only)

- * If you are using an AT&T Sceptre, you may wish to try logging on to the TABS service "Manually" first. It may make the "Programming" setup more meaningful.

* Follow the instructions in the section "Logging on to Tymnet".

* When using the "Auto-Logon" process programmed into the Sceptre unit, remember the following:

- When the connection to Tymnet has been established, it takes a few seconds for Tymnet to contact TABS.

- We will respond by first displaying the Aviotex logo and finally ask you to:

"ENTER
USER ID:"

- At this point, you should respond to the user ID prompt by pressing the [CONT] key at the top of your Sceptre keypad.

- We will then ask you to:

"ENTER
PASSWORD:"

- You should respond to the PASSWORD prompt by pressing the [CONT] key a second time.

TIP 4 - RETURNING TO MENU SELECTIONS:

* From time to time you will be instructed to "Press [RETURN] for menu" or "Press [SEND] or [RETURN] for submenu" by a page displayed on our data base. Such messages are normally found on the bottom of your screen.

* The Sceptre [RETURN] key does not function for these instructions.

* You must first press the [SPACE BAR], then press the [SEND] key to emulate the [RETURN] key.

TIP 5 - "HOST OVERFLOW" - ERROR MSG:

- * The "Auto-logon" and manual instructions require you to enter a "CTRL" and "R" in the logon sequence. Verify that sequence.

TIP 6 - PRINTING

- * The Sceptre is capable of printing the video displays by the use of a "Composite video printer."

You may obtain information on these printers by contacting your Aviotex sales rep or customer service.

TIP 7 - TRANSMISSION ERRORS

- * If you have problems logging on through the network, please note the details and report them to Aviotex/TABS customer service.
- * Make a note of the following:

- The Tymnet telephone access number
EX: (714) 756-8341
- The Tymnet node and port numbers

After you enter your terminal identifier, the Tymnet node you have dialed will display a series of numbers similar to the following:

EX: -3427-005- OR -3427-02-005-

- Check to make sure that no one else has picked up your extension phone in an other room.
- Make sure the "CTRL" and "R" sequence has been entered properly.

TIP 8 - LINE NOISE

- * Line noise will often be responsible for some obvious geometric shapes in your data display.
- * Often times, after dialing a few of the digits in your access number, you may hear static, "Rushing waves", or erratic popping sounds.

If this is the case, the noise is local to your area. You should report these findings to your local telephone company and request the line be tested.

TIP 9 - TIME CREDIT & DOLLAR CREDIT

- * Should you wish to share tips with your fellow subscribers, please provide them to us. For each tip we can use, we shall provide you with 5 minutes credit on your billing.
- * Should you introduce a TABS prospect, upon subscription of that prospect we will credit your account with \$5 or 30 minutes.

SOME COMMON QUESTIONS

HOW AM I BILLED FOR USING TABS?

Connect time charges are billed once a month. You have the following billing options:

- * Direct billing via your Mastercard, Visa or American Express charge card.

Through this method, your connect time will be billed at the rate of \$.50 per minute against your charge card account.*1

- * Aviotex/TABS monthly invoice at the rate of \$.60 per minute.*1
- * To take advantage of our reduced rates, you may pre-pay your connect time in hourly increments of \$30.00.*1
- * With practice a weather briefing & flight planning for IFR weather, will take you about 5 minutes, or \$2.50 per session.

WHAT ARE THE TABS INFORMATION SERVICE RATES?

- * Your connect time will be billed at the above rates. There are no prime time, transmission speeds, or per product rates. The number of minutes you use times the applicable rate is what you owe.

DO I HAVE TO DIAL LONG DISTANCE TO ACCESS AVIOTEX/TABS?

- * No, not if you live within the local dialing radius of the Tymnet communication network.

*1 Price subject to change without notice

AT WHAT BAUD RATE SHOULD I SET MY MODEM TO USE AVIOTEX/TABS?

- * Aviotex/TABS suggests you set your modem at the highest baud rate available for your area.
- * Tymnet supplies 2400 baud access lines to some of the more "User" populated areas.
- * The graphics maps are currently available only on 1200 baud rate.
- * ASCII system (text only) is currently available up to 2400 baud.
- * At no time do we suggest the 300 baud access due to the nature of our graphic product presentations.

WHAT ARE THE TIMES I CAN USE THE AVIOTEX/TABS SERVICES?

- * Aviotex/TABS weather briefing service is available 24 hrs/day, seven days/week.
- * Our flight plan filing service requires scheduling on your part: The service is available on week days:

0830 PST - 1730 PST
OR
1630 GMT - 0130 GMT

- * Do not forget to add one hour when CA is on daylight savings time.
- * Once NADIN allows AVCOMPS to direct file flight plans, then you will be able to file 24 hours per day.

WHERE CAN I GET HELP?

- * At most on-line prompts, you can obtain a list of commands, information and instruction by entering the word "HELP". Some products have their own set of commands and in most cases using the "HELP" command provides immediate assistance.
- * If your question requires our attention and/or research, call the customer service number.

Questions that will require research or your suggestions for improvements, are best submitted by mail to the following address:

Aviotex Corporation
Customer Service Dept.
3158 Redhill Avenue
Suite 270
Costa Mesa, CA 92626

- * Your most immediate problems, such as assistance in logging on, can be directed to the customer service staff by telephone.

Customer service is available at:

(800) 255-8227
Mon - Fri: 0900 - 1830 PST

Before placing your call, make sure you have your access system and have the following information at hand:

- Account billing name
- Your TABS USER ID & PASSWORD
- Telephone number you are calling from
- Access terminal type such as:

AT&T Sceptre, ASCII terminal or personal computer in addition we will need the following information:

- a- Type of computer
- b- Software type and parameter settings
- c- Amount of dynamic memory installed
- d- Modem type, com port and baud rate
- e- Graphics card type (if applicable)
- f- Printer and graphics print utility type

This information will help us serve you better.

THE TABS SERVICE

TABS is accessible in several ways:

- +Through FBO's where the TABS IPU's are installed.
- +Through FBO's where the Multi Service/TABS IPU's are installed.
- +Through FBO's where Flight Data Center terminals are installed.
- +Through Canadian FBO's where World Weatherwatch IPU's installed.
- +Through your Personal Computer.
- +Through your Videotex Decoder Unit.
- +Through your TABS portable unit.
- +Through your Dumb Terminal.

>>FBO access is accomplished by use of our TABS IPU (Information Provider Unit) at the FBO. All you need to access the TABS system is your USER I.D. and PASSWORD. If you have a problem with your USER I.D. and PASSWORD, please call us at:

1-800-255-8227
1-800-255-TABS

Alternatively, all you need to do is pick up the IPU telephone (where available) and dial [*1] to call Aviotech. The IPU has easy to read access instructions, and is very user friendly. Your FBO manager has an access card to the IPU. If you ask, he may give you a free weather briefing.

>>Access can also occur at FBO's where Flight Data Center terminals are installed. In this case you must obtain from the FBO, the FDC "key".

>>Access can also occur at FBO's where Multi Service/TABS IPU's are installed.

>>Through FBO's in Canada where World Weatherwatch terminals are installed. Then all you need is your TABS ID and PASSWORD.

>> Personal computer access requires varying combinations of software and peripherals. The needed peripherals will depend upon your type of computer and its existing configuration. If you are unsure of your requirements, call Aviotex. We stock many of the items that you may need. Refer to Appendix B for more detailed instructions.

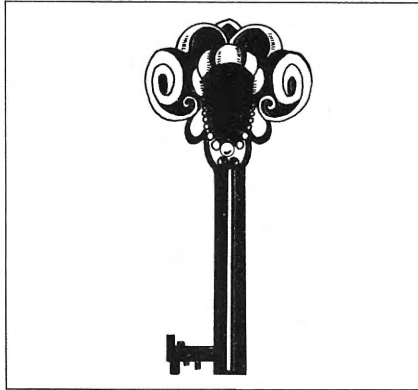
>> Access with a videotex-decoder (Sceptre) unit requires only a telephone and a color television or color monitor. The Sceptre system is completely portable, and can be used anywhere in North America. Refer to Appendix B for more detailed instructions.

>> Access with the Aviotex TABS portable unit is easy. The unit consists of a decoder, a small color television and a printer, all fitted inside its own high impact carrying case. All you need is a telephone jack and AC power. It is designed for pilots that are on the go. Refer to Appendix B for more detailed instructions.

>> Access of TABS TEXT system requires a modem & any ASCII terminal. Refer to the TABS TEXT user manual for more detailed instructions.

Each method of accessing TABS has a complete set of instructions with it. Personal computer owners will be dependent upon their operational manuals and Appendix B to successfully gain access. Sceptre and IPU users are provided with comprehensive instructions. Refer to Appendix B for more detailed instructions.

SECURITY



Access to TABS is accomplished with your USER I.D. and PASSWORD. These two can be pre-assigned numbers, letters, or a combination thereof.

Your USER I.D. and PASSWORD are confidential! Our computer recognizes these codes, and bills for services based on recognition of these codes. It is in your interest to see that your PASSWORD is not compromised. Should it be suspected that this is the case, immediately call us and we will change your PASSWORD.

TABS DATA BASE & DATA PROCESSING CENTERS

TABS is currently supported by two data processing centers, housing powerful computers and communication pads. One center is located in Costa Mesa, CA, which is the Aviotex corporate office and the other is located in Toronto, Canada. The two centers are linked via dedicated communication lines which give redundancy to the TABS system.

TABS supports a very large data base that is updated continuously, 24 hours a day. TABS is a very user friendly system which is both menu and "keyword" driven to allow easy user access. You will be pleased to know that your weather briefing system is state of the art.

At printing time, TABS supports the following sub-systems:

- . Complete North American weather including Hawaii and Alaska.
- . NOTAMS (Class 1 only)
- . PIREPS
- . Flight planning & route building
- . Flight plan filing
- . Aviation news
- . Reservations (airline, hotel, and car)
- . IPU and FBO location directory

Should you believe we can be of greater service to you by adding other information to the TABS data base, please do not hesitate to contact us. We welcome you to use the form in Appendix F.

USING THE SYSTEM

The best way to understand the TABS system is to use TABS with this manual. IPU users can go to your nearest FBO equipped with an IPU. For a listing of IPU locations call your local FBO or Aviotex.

Home users set up your equipment in accordance with the instructions in Appendix B.

Users connecting to the TABS data base from IPU's located at FBO's need only to push the green [START] button to begin the session.

The first page displayed is the USER I.D./PASSWORD page (Figure 1-1). This is where you type in your codes.

If you are unable to connect after three attempts, TABS will display a message asking you to please call us (see Figure 1-2).

TABS data base is organized as a book. It has a table of content called a Main Menu (Fig 1-3). The Main Menu lists the part numbers, each of which are called submenu. Each submenu, lists chapters called products. Each product has a keyword. All keywords are listed in the Appendix section of this manual. Each time you select a number & press [RETURN], you page forward in the book. To page backward, simply press [RETURN]. (Sceptre users see Tip 4 page 4.)

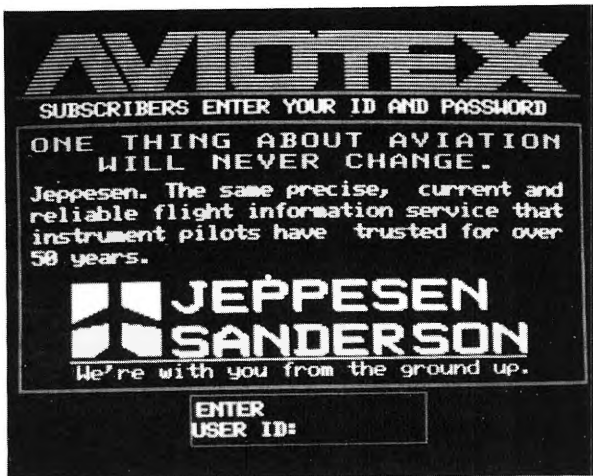


FIG 1-1

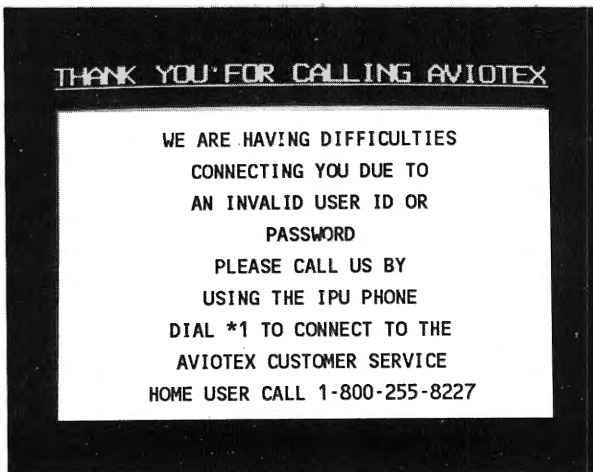


FIG 1-2

Therefore, a very important key on your keyboard is the [RETURN] key. Almost every command to display information on the monitor screen requires this key. If you are using an IPU, locate this key. If you are using a Sceptre, or a TABS portable unit, the [SEND]* key accomplishes this function. Personal computer users need to locate the key that accomplishes an "enter" function to input a command in to the computer. For clarity, we will use [RETURN] as our "enter" key for the remainder of this users manual.

TABS is built on the use of selection menus. A way to bypass menus will be discussed later. However, the use of menu functions makes TABS fail safe. Each menu has a number of selections which allows you to press the key associated with that selection, and then [RETURN] to display your selection on the screen.

Once connected to TABS, the computer will verify your USER I.D./PASSWORD. If valid, it will display the TABS Main Menu. This page lists the TABS current submenus. From this point on, TABS utilization can be very quick and easy. We will now show you several ways to get the information you need from TABS.

Let's access the weather submenu. Press the number [1] key followed by the [RETURN] key. TABS will immediately display the weather submenu (Figure 1-4). The low level submenu contains all weather up to 18,000 feet. The high level submenu contains all weather above 18,000 feet. The third submenu indicates weather products that are coming soon.

*Note: In cases where you are entering a command which involves only pressing the [SEND] key, make sure you press the [SPACE BAR] key before pressing the [SEND] key. Otherwise, the Sceptre will not respond to your request.

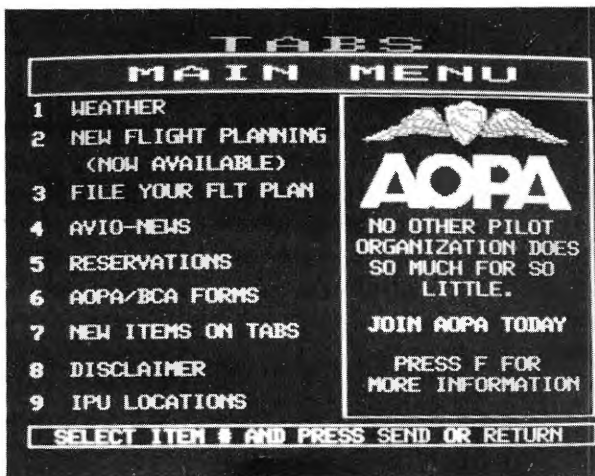


FIG 1-3

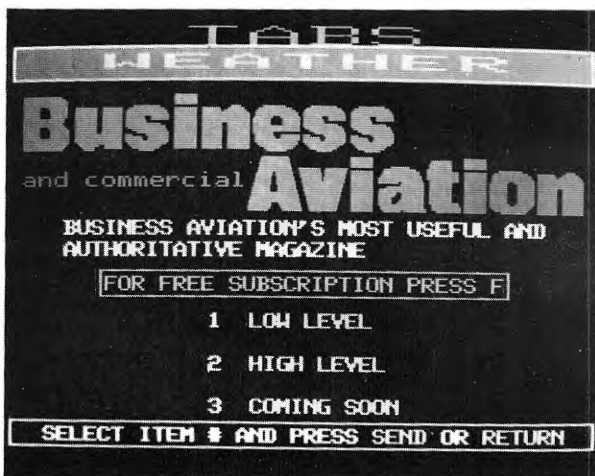


FIG1-4

Call up the low level or high level submenu by pressing [1] or [2] and [RETURN]. Figure 1-5 or 1-6 should now appear.

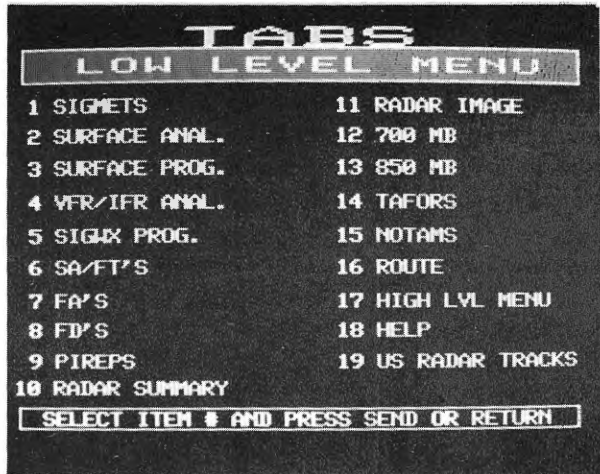


FIG 1-5

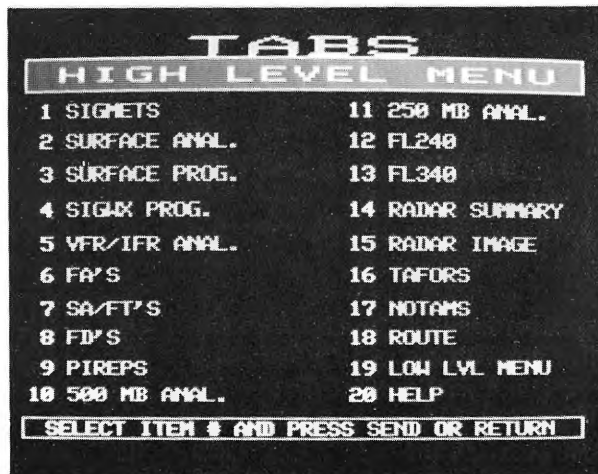


FIG 1-6

Now, from the low or high level submenu, select any item you desire and press [RETURN].

After you are finished with the weather data base, press the [MAIN MENU] key at the IPU or type "MAIN" and press [RETURN]. This will display the main menu.

Should you wish to bypass submenus, you may access any portion of the data base by use of keywords. These keywords are listed in the Appendix section of your users manual.

KEYWORDS

LL = Low Level Weather Menu
HL = High Level Weather Menu
MAIN = Main Menu
EXIT = Quit

Example: From the Main Menu, we wish to access the Low Level submenu. Type: [L] [L] [RETURN]!

KEYWORDS AND FAST ACCESS

Keywords allow you to access the TABS system more rapidly. Appendix A lists all keywords that can be used to bypass all menus and go directly to the observation/information page you desire. Remember to press [RETURN] after the keyword. Some keywords are two or more words long; don't forget to use the [SPACE BAR] bar on your keyboard to separate words.

As in any situation requiring speed and skill, practice is essential. Use the key words in Appendix A to study the information shown on the monitor. This will help you understand how the data base is organized. With a little practice, you will have your own Flight Service Station (FSS) at your finger tips! However, for beginners the use of menus and submenus is advisable. These items will show you the additions to the data base.

REMEMBER

Press [RETURN] after each entry.

Press [SPACE BAR] between words.

FLYING WITH TABS WEATHER

TABS weather is very comprehensive for both the low and high altitude structure. Now you too have the benefit of face-to-face weather briefings, 24 hours a day, 7 days a week. Today, the professional pilot is presented with new demands on his time and flexibility. TABS enables any pilot flying, either at high or low altitude, to access the full range of aviation weather information available at any FSS. Aviotex is pleased to bring you a fully automated color graphics and full ASCII systems. TABS features allow a "quick look" observation or an in-depth analysis of existing conditions, forecasts and trends. Let's do a few examples to illustrate this point.

The Surface Analysis Chart (Fig 1-7) will allow you to see the nationwide general weather trends and how they may affect your flight. To get this chart, you may do one of two things.

- 1- From the Main Menu select "Weather".
From the "Weather" submenu select "Low Level" or "High Level".
From the Low Level or High Level submenus select "Surface Analysis".
Then select the area desired, OR
- 2- From anywhere, type "SFCA USA"

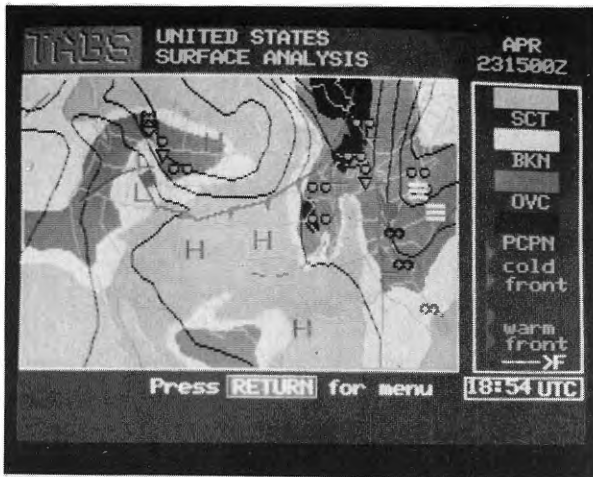


FIG 1-7

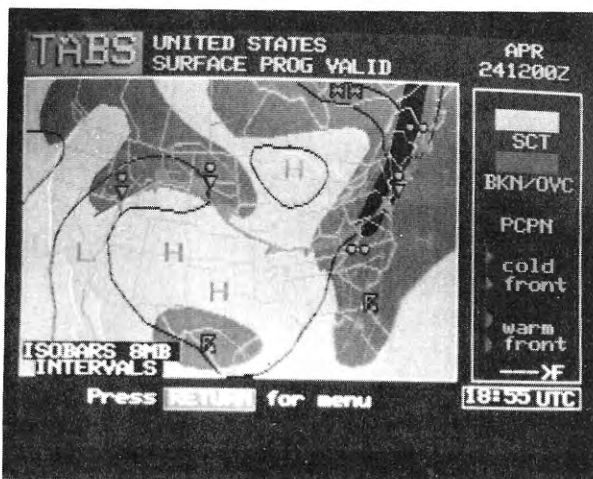


FIG 1-8

KEYWORDS

SFCA	= Surface Analysis Menu
SFCA USA	= Surface Analysis USA
SFCA CAN	= Surface Analysis Canada
SFCA ALA	= Surface Analysis Alaska
SFCA NAM	= Surface Analysis North America

Fronts, sky conditions, precipitation and pressure patterns will all be illustrated in this chart. Notice that the side legend can be scrolled several times forward or backward by pressing the [F] or [B] keys, respectively followed by the [RETURN] key. Alternatively, at our IPU's, you may simply press the [PAGE >F] OR [PAGE <B] keys.

The Surface Prognosis Chart (Fig 1-8) can also be observed to see what significant changes may occur within the next 24 hours of flight.

Notice that all the charts are basically presented in the same format. You will always find the current GMT time, date and valid time on the chart. If the chart is late from the National Weather Service, the screen will state this fact.

KEYWORDS

SFCP	= Surface Prognosis Menu
SFCP CAN	= Surface Prognosis Canada
SFCP USA	= Surface Prognosis USA
F [RETURN]	= Page Forward
B [RETURN]	= Page Backward

TABS ROUTE WEATHER

Accessing the TABS low level "route" function by use of the key word ROUL, will allow you to enter your intended route of flight by using location identifiers separated by a space (Fig 1-9). The corresponding high level keyword is ROUH. TABS will display Surface Aviation reports (SA), Terminal Forecasts (FT), Class 1 NOTAMS, and winds aloft (FD) for all requested points. Note that if you wish high level winds (above 18000), you must select ROUH. In addition, the report will include all weather within 25 nautical miles either side of a line connecting those points.

For a complete weather briefing, be sure to access all other sections of the weather submenu. Refer to paragraph 502 of the Airman's Information Manual for recommendations on weather items for a complete preflight briefing.

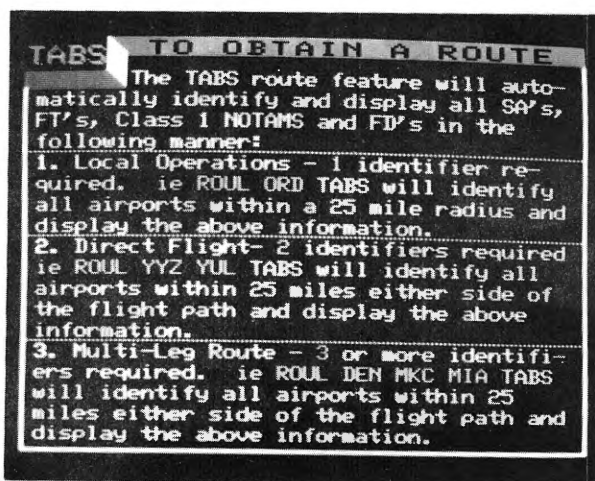


FIG 1-9

KEYWORDS

ROUL = Route Low Level
ROUH = Route High Level

Remember: it is always a good idea to save and/or print your data for later use.

HELPFUL HINTS

Whatever your level of aeronautical experience, TABS can meet your needs. A few suggestions will help you along:

1. Abbreviations can be deciphered by using TABS "HELP" feature which will translate the more obscure NWS contractions you may see in the text of the reports. As an ongoing process, we do try to decode some of these coded items. For example, type SADE LAX & press [RETURN].
2. Use keywords as much as possible to move around freely in the data base. This will save you time and effort.
3. Read the instructions provided with your videotex-decoder, PC and IPU unit before attempting to access TABS. This will save you time.
4. Should the IPU be out of paper, see your FBO front desk manager or call Aviotex on the IPU phone by dialing [*1].
5. Should you desire to terminate your viewing of information rapidly, just type the keyword "EXIT" and press [RETURN]. TABS will immediately disconnect you from the system. At the IPU, press the [EXIT] key. Should you forget to exit from the system, you will be automatically disconnected ten minutes after your last entry. This time will be charged to your account.
6. Call us anytime you have questions about TABS. Our toll free number is 1-800-255-8227.

KEYWORDS

SADE.AAA = DECODE SA where AAA
is a station ID

EXIT = EXIT

FLIGHT PLANNING

TABS flight planning provides an on-line interactive system for producing flight plans based on Minimum Time Track (MTT), Minimum Distance Track (MDT), point to point direct, point to point via airways, point to point via personal route, point to point using Rnav & point to point using Loran. TABS utilizes a fine grid of upper air winds and temperatures. When these winds are used in conjunction with specific performance data for your aircraft and the complete high and low level airway structure, the resultant plans have a high degree of accuracy.

Aircraft performance information are stored on the TABS computers in two (2) ways. First, the complete cruise performance sections of an aircraft are loaded into the system by "Generic" name. Such performance tables are normally obtained from the user, if not already on the system.

Second, you may elect to forward to Aviotex the specific information for your aircraft. Aviotex will load this information for your specific tail number upon request.

As an option, Aviotex shall build individual records in the system for your specific tail number. These records contain such information as your operational empty weight, maximum weights for take-off, landing and zero fuel. The fuel capacity, maximum operating altitude, fuel bias, engine type, and type of navigational equipment is also stored. When your record by tail number is complete, you may then flight plan using either the "generic" type or your tail number. Enter option 5 on the flight planning menu for a list of all "Generic" aircraft types currently resident on the system. TABS will respond by presenting a manufactures list. Select the manufacturer by entering the item number. Then page forward by using [F] [RETURN].

The system is designed to optimize fuel through vertical and lateral analysis which may result in step climbing to more fuel-efficient altitudes.

From the TABS Main Menu, enter the Flight Planning sub-menu by selecting number 2, in order to calculate your flight plan. The following Flight Planning submenu will be displayed (Fig 2.0).



FIG 2-0

Here you must decide if you wish to calculate MTT/MDT or a point to point, Rnav or Loran flight plan. If you decide on the latter, select [3] [RETURN]. For a MTT or MDT you must select [1] or [2] respectively.

While entry of 1 or 2 will produce screen formats that look the same, you must be selective. If you want to do a MTT, select number 1; if you want to do a MDT, select number 2. Be aware that although the screens look the same, the programs they activate are not. Note that in many cases, the two routes produced may be the same, due to the "general" east-west wind flow. Where they normally differ is in an area of abnormal wind patterns, usually associated with a north-south trough. After the type of plan (MTT or MDT) has been selected, the system allows either a personal aircraft or a generic type to be used.

After selecting item [1] (MTT) from the Flight Planning submenu, the following submenu should be displayed (Fig 2.1).

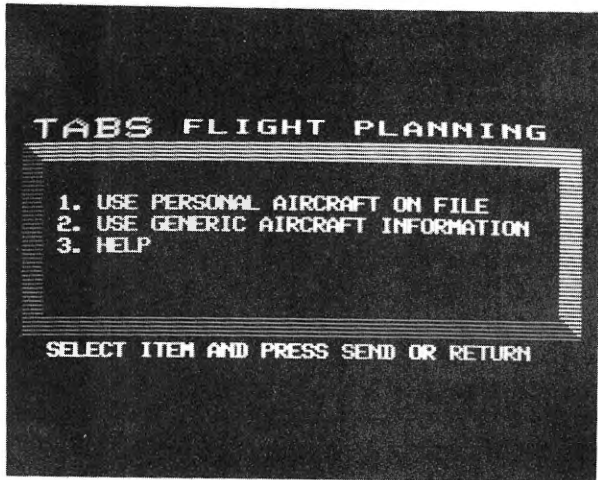


FIG 2-1

Selecting item 2 from this menu (Fig 2.1) will display the final screen (Fig 2.2).

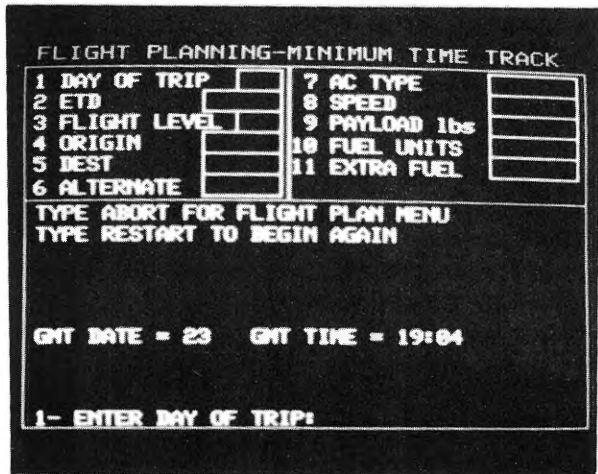


FIG 2-2

Note: Box 7 in Fig 2.2 reads "A/C type". Had a personal aircraft been selected in Fig 2.1 above, this box would read "Tail number".

For each of the eleven items in Fig 2.2, help and examples are displayed. In this example, TABS asks for the day of the trip. The user must type [2][3] [RETURN]. Next TABS will ask for the ETD. For more details, see Appendix C.

The following is an example of a "Filled In" screen, for a Gulfstream 3 flying from Los Angeles to Las Vegas, using a return alternate of Los Angeles; and the resulting flight plan.

```
FLIGHT PLANNING-MINIMUM TIME TRACK
1 DAY OF TRIP [23] 7 AC TYPE [G3]
2 ETD [20:00] 8 SPEED [80]
3 FLIGHT LEVEL [LF] 9 PAYLOAD lbs [4000]
4 ORIGIN [LAX] 10 FUEL UNITS [LBS]
5 DEST [LAS] 11 EXTRA FUEL [0]
6 ALTERNATE [LAX]
TYPE ABORT FOR FLIGHT PLAN MENU
TYPE RESTART TO BEGIN AGAIN
IS ALL THE DATA CORRECT?(Y/N)
```

FIG 2-3

Note: The User has answered all questions requested, one at time. TABS now is asking if all information is correct. If the answer is yes, type [Y] [RETURN]. If the answer is no, type [N] [RETURN]. Then follow directions.

TABS **FLIGHT PLAN**

WARNING: FLIGHT PLANNING CURRENTLY DOES NOT INCORPORATE MEAS OR MAAS

231918Z
 FLT REL AV10959 LAX/LAS M:80 A/C G3

	FUEL	TIME	TOGHT	LIGHT	W/C
DEST LAS	002191	0032	49075	46884	P000
CONT	001963	0045			
ALTN LAX	002020	0039	DIST 0214	W/C P000	
HOLD	000000	0000			
REQD	006174	0156	ZFM		042900
EXTRA	000000	0000	PAYLOAD		004000
TTL AT TO	006174	0156	RTE MT	DIST	216

PRESS RETURN FOR MENU >>>F

▲ FIG 2-4 ▼

TABS **FLIGHT PLAN**

CKPT	F/L	DIST	T/H	ZNT	THP	TAS	FUEL
	WIND	ZND	M/H	TIME	TRP	G/S	x10
LAX	CLB	0005	247	0001	P07	CLB	0606
		20009	005	233	0001	39	—
TOC*	270	0046	057	0007	P10	364	0514
		19009	041	043	0008	38	370
DAG	270	0116	056	0009	P00	479	0449
		22015	070	042	0017	38	493
TOD*	270	0144	046	0003	P00	479	0422
		21011	020	032	0020	38	489

PRESS RETURN FOR MENU BCKF

TABS **FLIGHT PLAN**

LAS DSC 0212 047 0012 P07 DSC 0400
 18009 068 033 0032 38 ———

LAS/A DSC 0216 052 0001 P07 DSC 0398
 18009 004 038 0033 38 ———

(FPL AV10959 I
 -G3/R SDI/R
 -KLAX2000
 -0479F270 DCT LAX J9 LAS DCT
 -KLAS2032 KLAX
 -REG/ G3)

FIX ID	LATITUDE	LONGITUDE
LAX/A	N 33 56.5	W 118 24.4
LAX-CA	N 33 56.0	W 118 25.9

PRESS RETURN FOR MENU BK>F

▼ FIG 2-4a ▲

TABS **FLIGHT PLAN**

DAG-CA	N 34 57.7	W 116 34.6
LAS-NV	N 36 4.8	W 115 9.5
LAS/A	N 36 5.0	W 115 9.2

PRESS RETURN FOR MENU BK<<<

In Fig 2.4 a , under the header "FIX ID", LAX/A is used to designate the Los Angeles airport, while LAX-CA is used to designate the Los Angeles VOR. This is necessary because they have different coordinates. The two letters following the "-" indicate the state where the fix is located.

Had number 2 (MDT) been selected in the Flight Planning submenu (Fig 2.0), the system would have displayed the MDT screens and produced a MDT flight plan. MDT is the shortest airway combination between origin & destination. The presentation format is identical to MTT. Use the MTT directions along with Appendix C for a thorough understanding of the system.

The selection of item 3 in the Flight Planning submenu (Fig 2.0), displays the personal route screen (Fig 2.5) and produces a personal route flight plan.

```
FLIGHT PLANNING-PERSONAL ROUTE
1 DAY OF TRIP [ ] 7 TAIL NUMBER [ ]
2 ETD [ ] 8 SPEED [ ]
3 FLIGHT LEVEL [ ] 9 PAYLOAD lbs [ ]
4 ORIG [ ] 10 FUEL UNITS [ ]
5 DEST [ ] 11 EXTRA FUEL [ ]
6 ALTERNATE [ ]

TYPE ABORT FOR FLIGHT PLAN MENU
TYPE RESTART TO BEGIN AGAIN

GMT DATE = 28 GMT TIME = 23:04

1- ENTER DAY OF TRIP:
```

FIG 2-5

Note: In order to use this personal route feature, you must first pre-build the route. The personal route building facility is available by selecting item 4 of the Main Flight Planning submenu (Fig 2.0)

Route Building

The selection of item 4 in the Flight Planning submenu (Fig 2.0) allows two types of routes to be constructed. That selection produces a new screen as depicted on (Fig 2.6).

As can be seen from fig 2.6, TABS requires you to select the type of route you wish to build. The first option is good for VORs, Loran, and Rnav. The second is used for all the above as well as airways.

"Directs" can be substituted for airways upon leaving the departure airport, approaching the arrival airport, or anywhere in between. In addition, there is a "GRID" of geographic coordinates stored in the system that can be accessed. This grid has points at every whole degree of latitude and every whole degree of longitude within the boundaries of the United States.

An example: J16 originates in Portland, Oregon (PDX) and terminates in Boston, MA (BOS). Along that particular airway are 13 VORs plus 8 intersections or points defined on the Jeppesen charts. A route could be built using this method by simply asking for a "Direct" to the Portland VOR, then by airway J16 to the Boston VOR and direct to the Boston airport. If it was desired to build a Standard Instrument Departure (SID) or a Standard Arrival (STAR) by going direct from one point to another, then that could be done as well.

When you specify that you want to build the route on J16 from PDX to BOS, TABS will find the IDs of all the enroute fixes between the two VOR's. These are incorporated into a single route that you can flight plan on. Should you wish to branch off J16 at some point along the airway and take another airway, you simply specify the last point on the airway over which you intend to fly, then ask for the new airway, continuing along it to destination or branching off to another airway.

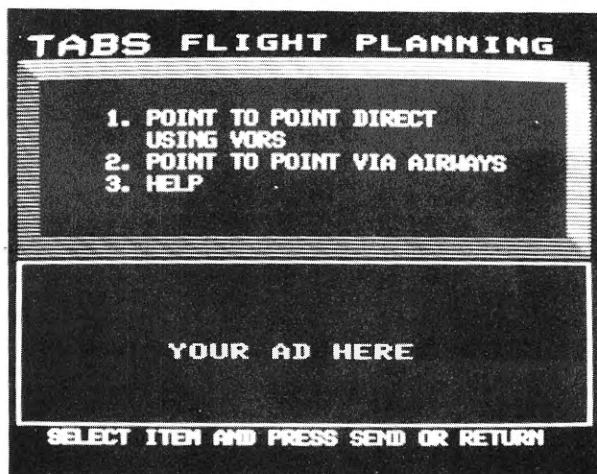


FIG 2-6

The following route was built based on selection of number 1 (Fig 2.6), "build a route point to point direct using VOR's". It is not necessary that the points be VOR's. In this case a combination of VOR's and geographic coordinates are used. The origin and destination vector mileage boxes are used to simulate a "SID" or a "STAR". Pressing the [RETURN] key automatically generates 4 N.M. at each end of the route. If a real "SID" or "STAR" was built, then these boxes should have a zero typed in. If you wish more vector mileage, simply type your selection & press [RETURN].

TABS FLIGHT PLANNING			
PERSONAL ROUTE BUILDING SYSTEM			
1 ORIG	PDX	4 ORIG VEC MI	4
2 DEST	BOS	5 DEST VEC MI	4
3 TYPE	DOMESTIC		

TYPE ABORT FOR FLIGHT PLAN MENU
TYPE RESTART TO BEGIN AGAIN

ENTER THE NAME OF THE AIRWAY TO BE FOLLOWED TO THE NEXT FIX, OR PRESS RETURN FOR 'DCT'. THIS FIELD ALLOWS UP TO 8 CHARACTERS.

ENTER AIRWAY NAME OR HIT RET FOR 'DCT':

FIG 2-7

In order to build your route, simply follow the prompts provided by TABS. For each of the 5 items on Fig 2.7, Help and examples are displayed (See Appendix C).

Note: You can not build a route from airport direct to another airport. You must build your route first to a check point, then to at least a second check point, then to your destination airport. Those check points can be VOR's, intersections or geographic coordinates.

```

TABS FLIGHT PLANNING
PERSONAL ROUTE BUILDING SYSTEM
1 ORIG PDX 4 ORIG VEC MI 4
2 DEST BOS 5 DEST VEC MI 4
3 TYPE DOMESTIC

ORIGIN: PDX DEST: BOS ACC DIST: 2248.4

AWY DEST DIR T/T DIST
DCT PDX-OR E 5.4 9.6
DCT 46N110W E 88.4 525.6
DCT 43N88W E 100.7 955.3
DCT 43N82W E 90.0 263.2
DCT BOS-MA E 94.5 486.7
DCT BOS-A E 315.0 0.0
PRESS RETURN FOR MENU

```

FIG 2-8

Note: The latitude & longitude coordinates are entered by inputting whole numbers as follows

EX: [4][6][N][1][1][0][W][RETURN]

It is necessary to note that Fig 2.7 and 2.8 are one and the same. The latter was filled in item by item; then TABS produced the results presented on Fig 2.8.

```

TABS FLIGHT PLANNING
PERSONAL ROUTE BUILDING SYSTEM
1 ORIG PDX 4 ORIG VEC MI 4
2 DEST BOS 5 DEST VEC MI 4
3 TYPE DOMESTIC

TYPE ABORT FOR FLIGHT PLAN MENU
TYPE RESTART TO BEGIN AGAIN

ENTER THE COMPLETE FIX IDENTIFIER, OR
ENTER A PERIOD (.) TO INDICATE THE
DESTINATION AIRPORT.

ENTER NEXT FIX:

```

FIG 2-9

The following route (Fig 2.10) was built based on selection of number 2 (Fig 2.6), build a route point to point via airways.

Note: In the following example (Fig 2.9 and 2.10) there were only 8 entries required to complete the route build for the high level structure as follows:

- 1) PDX 2) E 3) J16 4) BOS
- 5) E 6) DCT 7) . 8) E

THE "DCT'S" ARE GENERATED BY THE [RETURN] KEY.

Note: You must input [J][1][6][RETURN]

TABS FLIGHT PLANNING
PERSONAL ROUTE BUILDING SYSTEM

1 ORIG	PDX	4 ORIG VEC MI	4
2 DEST	BOS	5 DEST VEC MI	4
3 TYPE	DOMESTIC		

ORIGIN: PDX DEST: BOS ACC DIST: 2262.9

ANY	DEST	DIR	T/T	DIST
DCT	PDX-OR	E	5.4	9.6
J16	PDT-OR	E	91.1	153.0
J16	HIA-MT	E	88.0	283.4
J16	DIL-MT	E	91.2	148.2
J16	RECAP-MT	E	97.5	168.4
J16	DPR-SB	E	100.0	125.6

PRESS RETURN FOR MENU >>>

TABS FLIGHT PLANNING
PERSONAL ROUTE BUILDING SYSTEM

1 ORIG	PDX	4 ORIG VEC MI	4
2 DEST	BOS	5 DEST VEC MI	4
3 TYPE	DOMESTIC		

J16	FSD-SB	E	112.0	228.3
J16	MCI-IA	E	102.5	154.1
J16	SABBO-IA	E	88.7	94.7
J16	SIBER-MI	E	89.7	33.9
J16	DUTYS-MI	E	90.4	46.3
J16	BAE-MI	E	91.0	46.0
J16	GRUBB-MI	E	87.1	129.0
J16	ECK-MI	E	89.1	114.6
J16	YXU-CAN	E	100.8	70.0
J16	BUF-NY	E	93.4	110.0
J16	SAMPS-NY	E	91.8	64.8

PRESS RETURN FOR MENU <<<

TABS FLIGHT PLANNING
PERSONAL ROUTE BUILDING SYSTEM

1 ORIG	PDX	4 ORIG VEC MI	4
2 DEST	BOS	5 DEST VEC MI	4
3 TYPE	DOMESTIC		

J16	AUBIL-NY	E	92.5	32.1
J16	FABEN-NY	E	92.9	21.6
J16	ALB-NY	E	93.9	94.9
J16	BOS-MA	E	100.6	126.4
DCT	BOS/A	E	315.0	0.0

PRESS RETURN FOR MENU <<<

FIG 2-10

To use your personal route, select item 3 of the Flight Plan submenu and proceed as previously described.

Once your flight plan is calculated and you have a printout you may wish to file a flight plan. Type the keyword [FILE] and press [RETURN].

Note that your TABS flight plan includes an ATC approved text at the bottom of the plan. You may use this in the route section of the filing form. Then proceed with the next section of this users manual.

CAUTION

Although TABS provides state of the art flight planning, it is essential to remember that the flight plan is just that—nothing more than a plan. The critical calculations are based on forecasts, not facts. Once enroute, the plan must be modified using the winds as they exist, not as forecasted. Unforecasted conditions can also necessitate a change in cruise altitude, which in turn changes the fuel flow and TAS. The plan you make on the ground satisfies the rules; the plan you make enroute compensates for reality. No matter how thorough the flight plan, it is nothing more than the sum of many predictions concerning weather and your aircraft performance. Check your progress against the plan.

FLIGHT PLAN FILING

Flight plan filing can be accessed by selecting item 3 of the Main Menu. You will be presented with the standard FAA Flight Plan Filing Form. Generally, forms work a little different than the other TABS functions:

- a- To move from one field to the next field or from one line to the next line, press the [NEXT] key. On PC's press the [TAB] key.
- b- To move to a previous field with an IPU keyboard, press [PREV] key. With a Sceptre, press [CTRL + NEXT] key. On PC's press [shift] and [TAB].
- c- To delete the contents of a field, press the [<] key (Sceptre's press [BKSP].*
- d- To send the contents of the FAA form for processing, press the [SEND] key. On PC's press the [RETURN] key.

If you elect to file with TABS, the Aviotex flight planning personnel will fast file your flight plan directly with the nearest FSS "fast file" drop line. It is important to remember the following points:

* Sometimes you will find the backspace key [<] will not erase an input. In such a case press [SPACE BAR] followed by [BKSP].

1) Aviotex does not assume any responsibility and/or liability by offering this service to you. This service is offered in order to assist you with your filing. We shall file exactly what you pass on to us electronically. If you file an erroneous flight plan, Aviotex shall file exactly the same plan with FSS. **IF YOU DO NOT FILL OUT EACH AND EVERY SPACE IN THE FAA FLIGHT PLAN FILING FORM, AVIOTEX SHALL NOT FILE YOUR FLIGHT PLAN.** Be accurate with filing.

2) You must file your flight plan with TABS at least 30 minutes before your ETD. We receive hundreds of flight plans. They will be verbally filed in the order received. It is anticipated that the FAA will allow the automatic filing of flight plans by year end of 1987.

3) You must open and close your VFR flight plan as per the FAR's.

4) You must pick up your clearance from the appropriate clearance delivery frequency from your airport of departure.

5) **PRINT OUT YOUR FLIGHT PLAN**, so you know what you've filed.

6) To fill out the Flight Plan Filing Form, please refer to instructions (a) thru (d) of this section on page 39.

7) To send form press [SEND]. On PC's press [RETURN].

TABS		FLIGHT PLAN FILING			
TYPE	VFR	IFR	X	A/C ID	N666RT
A/C TYPE	/EQ	G3		/R	TAS KTS 480
DEP PT	LAX	ETD	2000Z	CRUISING ALT	270
ROUTE OF FLT: DCT LAX J9 LAS DCT					
DESTINATION				LAS	ETE HH:MM 00:32
REMARKS: NONE					
FUEL	HH:MM	01:56	ALTERNATE AIRPORT	LAX	
PIC NAME, ADDRESS, PHONE, AIRCRAFT BASE					
JOHN DOE, AMERICAN AIR CENTER, SNA, CA					
714 756 0888					
# ABOARD	5	COLOR OF A/C	WHITE, GOLD		

FIG 2-11

Note: To move from field to field, press [NEXT]. PC users select [TAB] key. To move the prompt from end of one line to new line, press [NEXT]. This form is not equipped with a carriage return. To mail form, press [SEND].

When you send your plan to Aviotex, the computer saves a copy and then prints the plan in a revised line by format. After the flight plan has been received & processed by Aviotex, the following message will be displayed:

```

YOUR FLIGHT PLAN
WAS RECEIVED

THANK YOU

PRESS RETURN TO CONTINUE

```

FIG 2-12

If the form was incomplete, a negative response will be displayed as follows:



FIG 2-13

The only two fields where TABS allows some latitude is the "REMARKS" field and the "PIC name---", etc, Field. There does not have to be anything in the remarks field and as long as the pilots last name and phone number (with area code) is shown, in the PIC name section, then TABS will process the plan. If any other piece of information is missing or garbled, then TABS will send a negative response to the user as in Fig 2.13.

AVIO-NEWS

TABS provides you with Business & Commercial Aviation Intelligence Reports, AOPA News Briefs and Speednews flashes. By selecting AVIO-NEWS on the Main Menu, you will receive the AVIO-NEWS submenu page. By selecting either item [1], [2], [3] or item [4] on this page, you can select the appropriate news section. To page forward in each section press [F] [RETURN]. To page back press [B] [RETURN]. In order to return to the Main Menu, press the [MAIN MENU] key. Alternatively, you may turn back the "book pages" by pressing the [RETURN] key.

Note:

F[RETURN] = Page forward key

B[RETURN] = Page backward key

RESERVATIONS

By selecting "RESERVATIONS" on the Main Menu, you will view the reservations instructions. The travel agency will accommodate you with airline, hotel or car reservations, and will charge your credit card.* Very shortly we will provide you a link to American Saber.

* Currently available on IPU's only

IPU AND FBO LOCATIONS

By selecting IPU and FBO LOCATIONS on the Main Menu, you will view the IPU/FBO location submenu by state. The [F] and the [B] followed by [RETURN] key allow you to view additional pages and previous pages. The [RETURN] key will bring you back to the IPU and FBO location submenu.

APPENDIX A

TABS KEY WORDS

As mentioned earlier, keywords allow you to access our services more rapidly thus minimizing your time on the system.

The following list details some of the keywords presently available on TABS. As new features are added to the system, this list will be constantly updated.

MAIN	Main Menu
HL	High Level Menu
LL	Low Level Menu
WS	Sigmat Regional Submenu
SFCA	Surface Analysis Submenu
SFCA NAM	Surface Analysis Chart - North America
SFCA USA	USA
SFCA ALA	Alaska
SFCP	Surface Prognosis Submenu
SFCP CAN	Canada
SFCP USA	USA
VFRH	VFR/IFR Contours Submenu
VFRH USA	USA
VFRL AA	VFR/IFR Dot plot charts submenu by states. Updated hourly at 25 minutes past the hour where AA is the state
VFRL AL	Alabama
VFRL AK	Alaska
VFRL AZ	Arizona
VFRL AR	Arkansas
VFRL CA	California
VFRL NCA	North California
VFRL SCA	South California
VFRL CT	Connecticut
VFRL DE	Delaware

VFRL FL	Florida
VFRL GA	Georgia
VFRL HI	Hawaii
VFRL ID	Idaho
VFRL IL	Illinois
VFRL IN	Indiana
VFRL IA	Iowa
VFRL KS	Kansas
VFRL KY	Kentucky
VFRL LA	Louisiana
VFRL ME	Maine
VFRL MD	Maryland
VFRL MA	Massachusetts
VFRL MI	Michigan
VFRL MN	Minnesota
VFRL MS	Mississippi
VFRL MO	Missouri
VFRL MT	Montana
VFRL NE	Nebraska
VFRL NV	Nevada
VFRL NH	New Hampshire
VFRL NJ	New Jersey
VFRL NM	New Mexico
VFRL NY	New York
VFRL NC	North Carolina
VFRL ND	North Dakota
VFRL OH	Ohio
VFRL OK	Oklahoma
VFRL OR	Oregon
VFRL PA	Pennsylvania
VFRL RI	Rhode Island
VFRL SC	South Carolina
VFRL SD	South Dakota
VFRL TN	Tennessee
VFRL TX	Texas
VFRL NTX	North Texas
VFRL STX	South Texas
VFRL UT	Utah
VFRL VT	Vermont
VFRL VA	Virginia
VFRL WA	Washington
VFRL WV	West Virginia

VFRL WI	Wisconsin
VFRL WY	Wyoming
VFRL HUDB	VFR/IRF Plot Analysis - Hudson Bay
VFRL SASK	Saskatchewan
VFRL MARI	Maritimes
VFRL NPRY	Northern Prairies
VFRL NOBC	Northern British Columbia
VFRL SOBC	Southern British Columbia
VFRL SALB	Southern Alberta
VFRL NWTR	Northwest Territories
VFRL SMAN	Southern Manitoba
VFRL NMAN	Northern Manitoba
VFRL QUEB	Quebec
VFRL NWON	Northwestern Ontario
VFRL SEON	Southeastern Ontario
SWL	Sig.Weather Prog Low-Mid level Submenu
SWL CAN	Sig.Weather Prog Low-Mid level-Canada
SWL CAR	Caribbean
VFR1	12 hr.Sig.Weather/VFR/IFR Prog- Surface to FL24
VFR2	24 hr.Sig.Weather/VFR/IFR Prog- Surface to FL24
SWH	Sig.Weather Prog Mid-High level Submenu
SWH NAM	Sig.Weather Prog Mid-High level North America
SWH NAT	North Atlantic
SWH NEP	Northeast Pacific
SWH NWP	Northwest Pacific
SWH CAR	Caribbean
FA	Regional Area Forecast Submenu
FA YYZ	Area Forecast - issued from Toronto
FA WUL	Montreal
FA WHX	Halifax
FA WEG	Edmonton
FA WWG	Winnipeg
FA WVR	Vancouver
FA YQX	Gander
FA YXY	Whitehorse
FA BOS	Boston
FA CHI	Chicago
FA SLC	Salt Lake City
FA MIA	Miami
FA SFO	San Francisco

FA DFW	Dallas
FA ANC	Anchorage
FA FAI	Fairbanks
FA JNU	Juneau
SA	SA/Regional Selection Submenu
SA AAA	Last 3 hours of SA's plus the current FT for station AAA. Standard 3 letter idents should be used e.g. SA LAX for Los Angeles.
SADE AAA	Last 3 hours of decoded SA's plus the current FT Standard 3 letter idents should be used e.g. SADE LAX for Los Angeles
FDL (FDH)	Low level (high level) winds aloft submenu
FDL (FDH) AAA BBB...JJJ	Provides Low Level (High Level) winds aloft for up to 10 stations AAA through JJJ. Standard 3 letter station idents should be used.
UA	Pilot Reports Submenu
UA CAN	Pilot Reports - Canada
UA EUS	Eastern U.S.
UA WUS	Western U.S.
UA ALA	Alaska/Hawaii
SD	Radar Summary Submenu
SD SMUS	Radar Summary - U.S.A.
SD NEWS	Northeast U.S.
SD SEUS	Southeast U.S.
SD SWUS	Southwest U.S.
SD NWUS	Northwest U.S.
SD SCUS	South Central U.S.
RAD YYZ	Radar Image from King City (Toronto, Canada)
850M	850 mb Analysis Chart for North America
700M	700 mb Analysis Chart for North America
500M	500 mb Analysis Chart for North America
250M	250 mb Analysis Chart for North America
NOTL	NOTAM Regional Submenu for U.S. Class 1 NOTAMS

NOTL AAA Current Class 1 NOTAMS for station
 AAA, i.e., NOTL LAX would give all
 current Class 1 NOTAMS in effect for
 Los Angeles.

ROUL (ROUH) AAA...JJJ Low Level (High Level) routing
 information for stations AAA through
 JJJ. Information includes SA's, FT's,
 Class 1 NOTAMS and Winds Aloft data.

FL24 Wind Analysis for 24,000 feet submenu
 FL24 NAM North America
 FL24 NAT North Atlantic
 FL24 NWP Northwest Pacific
 FL24 NEP Northeast Pacific

FL34 Wind Analysis for 34,000 feet
 FL34 NAM North America
 FL34 NAT North Atlantic
 FL34 CAR Caribbean

EXIT Disconnects you from TABS.
 HELP Places you in the HELP section of TABS.
 SDUS Radar tracks menu
 SDUS AAA Radar tracks where AAA is station ID
 TAF AAA Terminal Aviation Forecast in the ICAO code.
 FILE File flight plan.

FUNCTION KEYS

A special set of Function keys are available to TABS Users for frequent commands. They are called Macro-Keys. They are assigned to the keys [F1] to [F10].

F1 Main Menu	F2 Weather
F3 Flight Planning	F4 Avio-News
F5 Unused	F6 Unused
F7 Reservations	F8 Subscriptions
F9 Exit	F10 Help

APPENDIX B

I. IBM PERSONAL COMPUTER AND IBM COMPATIBLES MICROSTAR PERSONALITY + III SOFTWARE

The software reference manual that comes with this package will generally explain how to operate the software. Refer to the table at the end of this Appendix B for hardware requirements.

1. Selecting The Color Card Driver:

A. Type "PP3SET" followed by a [RETURN]

Result: You will see the title screen

B. Press any key to continue.

Result: You will advance to the directory of Graphics Card Drivers.

C. Select the Driver appropriate for the Color Card installed in your computer and press [RETURN].

Result: You will advance to the options screen.

D. Select the desired options and press [RETURN] or [RETURN] only for no options.

Result: You will return to the DOS prompt.

Note: It is advisable to accept the default values for the options screen by pressing the return key.

Systems configured with a VEGA EGA or QUADRAM Graphics card may require the "+VN" option from PP3SET's option page.

2. Setting Up The Software Parameters

- A. Type "PP3" followed by a [RETURN] to load PP3.

Result: You will see the title screen.

- B. Press [RETURN].

Result: You will advance to the Service Directory screen.

- C. Press [1] and [F1] to set up your TABS directory entry.

Result: You will advance to the setup page.

Note: Do not press [1] and [RETURN] key!
The return key will execute the service number selected. If you have done so, press [ALT] and [F10]. Personality + III will return you to the "Directory of Services" menu. Now repeat step C above.

- D. Enter the following information using the cursor control keys to move from entry to entry and substituting your access number, USER ID and PASSWORD where appropriate:

Service Name: TABS
Connect Sequence: ATDT0000000^M
~0~0~0A~2^RTABS^M
~0~0~0~0999999^M~68888^M

Where: 000000 = Tymnet access number
999999 = TABS USER ID
8888 = TABS PASSWORD

Note 1: Should you be using a modem that is not Hayes compatible, start with the dialing command appropriate for your modem. Consult your modem manual.

Handshake Type:	Full
Terminal Message:	PP3
Port:	Com1 or Com2, depending upon port configuration
Baud/Speed/Bps:	1200 or 2400, depending upon your modem and the availability of 2400 baud access in your area
Parity/Data/Stop:	None/8/1
Character Echo/Duplex:	No/Full
ASCII Command Type:	Character
Linefeed:	Normal
Videotex Command Type:	Character

E. Now press the [F1] key to return to the Directory of Services menu ... or ... press [F2] to execute this directory service entry.

Note: As mentioned in the bottom part of the instruction menu screen of PP+III: the [F1] key will update any changes you have made in the service entry to disk ... and ... [F2] key will ... A) Update the last changes made and execute the service ... or ... B) Execute the directory service number selected from the Directory Service menu.

3. Accessing The TABS system

Step A. Assumes you are continuing from the set-up instructions above.

Step B. Assumes a log on from the DOS C> prompt.

- A. Enter the directory # and [F2] or [RETURN] from the Service Directory screen.

Result: The PP3 software should make the dialup connection to TABS and automatically log into the system.

- B. From the DOS C> prompt, enter PP3 # [RETURN] where "#" is the number of the directory entry to be executed.

THE VANILLA DECODER SOFTWARE

Note: The following instructions are for accessing the TABS database after the Vanilla install instructions have been followed. Please refer to your Vanilla handbook.

1. Setting Up The Software Parameters

- A. Load the software into your computer by typing "TABS" from the DOS prompt.

Result: You will see The VANILLA Decoder copyright page with a menu on the right hand side of the screen. A cursor in the shape of a hand should be pointing to the "CONNECT" box.

- B. Move the cursor to the "SETUP" box by pressing the down arrow key several times. Then press [RETURN].

Result: The "SETUP 1" menu will appear with the cursor positioned on the "NXT SRVC" box.

- C. If this is the service that you wish to modify or create for access to TABS via Tymnet, move the arrow up one block, press [RETURN] and type in the name that you wish to call this setup followed by a [RETURN]. "TABS" will do nicely.

Result: The cursor will move down to the "PHONE #" box.

Note: If you wish to modify a service other than the first one, position the cursor on the "NXT SRVC" box and press [RETURN] until the desired setup appears.

- D. If your modem is a Hayes modem press [RETURN] and type in the Tymnet access number for your area followed by two [RETURN]s.

Result: The cursor will move down to the "TONE" box.

If your modem is Hayes compatible (Accepts the Hayes "AT" command set) but not recognized by The VANILLA Decoder as being Hayes compatible, enter the following dialing sequence in the phone box:

ATZ|,ATDT
0000000|

Where:	ATZ	Is the modem reset command
		Is the enter key as described in the VANILLA Decoder handbook page 2-15
	,	Is the modem pause command
	ATDT	Is "attention dail/touch tone"
	0000000	Is the Tymnet access telephone #

If your modem is not Hayes compatible and supports "Auto-Dialing" software, then follow your modem manual's instructions for setting up The VANILLA Decoder's communications functions. The setup example above or in The VANILLA Decode handbook (page 2-14) should be followed.

If your modem does not support the "Auto-Dialing" feature, setup The VANILLA Decoder communications parameters for manually dialing the TABS service. Refer to page 2-14 of The VANILLA Decoder handbook and your modem manual.

- E. Press [RETURN] until you exit the phone parameter box. The cursor should be positioned at the phone "SERVICE TYPE" box. To select the proper service, press [RETURN]. Then press the down arrow once.

Result: The cursor will be positioned on the "MORE" box.

- F. Press [RETURN].

Result: The "SETUP 2" menu will appear with the cursor positioned on the second box from the top.

- G. Press [RETURN] until the word "AUTODIAL" appears in the box. Then press the down arrow once.

Result: The cursor will be positioned on the "RATE" box.

- H. Press [RETURN] until the proper baud rate appears in the box. Then press the down arrow once.

Result: The cursor will be positioned on the "DATA BITS/PARITY" box.

- I. Press [RETURN] until the words "7 NONE" appear in the box. Then press the down arrow once.

Result: The cursor will be positioned on the "COM PORT" box.

- J. Press [RETURN] until the appropriate entry appears in the box. Then press [ESC].

Result: You will then see the "SAVE ?" menu.

K. Move the cursor to the "YES" box and press [RETURN].

Result: Your configuration will be saved and the main menu will soon appear.

2. Accessing The TABS System

A. Position the cursor on the "CONNECT" box and press [RETURN].

Result: A new menu will appear with the cursor positioned on the "DIAL" box.

B. Press [RETURN].

Result: The modem will dial the number programmed in the configuration. The screen will go blank and two and a half lines of x's will appear on the screen.

C. At any point while the x's are being displayed on your screen, press [shift] and [a] followed by a [RETURN].

Note: [a] must be an upper case [A]

Result: Tymnet will respond with a pad and port number followed by "PLEASE LOG IN:" and "USERNAME:" prompt.

Note: This username is not the same as your personal TABS access code (USER ID) which allows you to log into the TABS system.

D. Press [CTRL] and [R] at the same time followed by typing "TABS" followed by pressing a [RETURN].

Note: Make sure that there are no spaces between these keystrokes.

Result: The screen will first go blank. You will soon see the TABS log on page.

- E. Enter your USER ID and PASSWORD at the appropriate prompts.

Result: You will see the copyright page followed by the TABS main menu.

- F. Having set up The VANILLA Decoder by the above procedures, subsequent access to the TABS system can be executed from the IBM DOS prompt. Execute the "TABS.BAT" file by entering:

```
C>TABS[RETURN]
```

- G. VANILLA can also be executed from the IBM DOS prompt by using its "BATCH" commands listed in Appendix A of The Vanilla Decoder manual.

Example: C>VANILLA 4A C D

Where: C>VANILLA = The VANILLA executable

4A = Executing in the 4-color mode using texture table "A"

C = The command to execute the "CONNECT" box

D = The command to execute the "DIAL" box.

II. COMMODORE 64 AND 128

VIDEOTECH DECODER SOFTWARE

1. Setting Up The Software Parameters

- A. Load the decoder software into your computer.

Result: After the software has loaded, the screen will clear and the message "Naplps ready" will appear in the top left corner.

- B. Enter setup by pressing the Commodore key [C=] followed by [C].

Result: The setup page will now be displayed, showing all options with the default values surrounded by a rectangle.

C. Press [B].

Result: A purple box will encircle item "B. 1200".

D. Press [E].

Result: A purple box will encircle item "E. NONE".

E. Press [I].

Result: A purple box will encircle item "I. INFOMART".

F. Press [J].

Result: A purple box will encircle item "J. NAPLPS".

Note: All subsequent uses of Video-
tex Decoder Software II require
the above parameter settings.
If you should experience logon
difficulties, check the above para-
meters first.

G. Press the Commodore key [C=] and [C] at the same time.

Result: The screen will turn blank and the "NAPLPS READY" message will appear in the top left corner.

H. Press the Commodore key [C=] and [E] at the same time.

Result: These keystrokes switch local Echo on so that characters typed from the keyboard are displayed on the screen.

2. Accessing The TABS System

The following procedures assume that your modem allows dialup access from your Commodore keyboard using any number of communications software packages. If your modem requires its own special telecommunications software, Videotex Decoder Software II will not perform properly. Both software packages (Your modems' software and Videotex Decoder Software II) can not reside in memory simultaneously.

- A. Type the local Tymnet number preceded by the dialing sequence appropriate for your modem type followed by a [SHIFT] and a [RETURN] at the same time.

Result: You will hear the modem dialing followed by a highpitched answer tone. After the tone, you will see two and a half lines of x's.

- B. At any point while the x's are being displayed on your screen, press [shift] and [a] key or an uppercase [A].

Note: This must be an uppercase A.

Result: Tymnet will respond with a pad and port number followed by "PLEASE LOG IN:".

- C. Press [CTRL] and [R] at the same time followed by typing [TABS]. The press [SHIFT] and a [RETURN] at the same time.

Note: Make sure that there are no spaces between these keystrokes.

Result: The screen will go blank. You will soon see the TABS log on page.

- D. Enter your USER ID and PASSWORD at the appropriate prompts.

Result: You will see the copyright page followed by the TABS main menu.

III. APPLE IIE AND IIC

FORMIC SOFDEC SOFTWARE

1. Setting Up Your Software Parameters

- A. Load your Decoder software and call up the setup page.**

Result: You will see a setup page on the screen.

- B. Configure the parameters as follows:**

Parity: None
Word Length: 7 Bits
Baud Rate: 1200
Stop Bit: 1
Xon-Xoff: Yes

Result: You are now ready to access TABS.

2. Accessing The TABS System

- A. Dial your local Tymnet number.**

Result: You will hear a high-pitched carrier tone and see two and a half lines of x's.

- B. At any point while the x's are being displayed on your screen, press [A] followed by a [RETURN].**

Note: This must be an uppercase A.

Result: Tymnet will respond with a pad and port number followed by "PLEASE LOG IN:" and "USERNAME:" prompts.

Note: This username is not the same as your personal TABS access code (USERID) which allows you to log into the TABS system.

IV. AT&T SCEPTRE DECODER & TABS PIPU

For setup & operation of these units, please refer to the Decoders users manual. The last four pages in the Sceptre user manual explain how to program the units and how to log on to the TABS data base.

For a copy, call 800-255-8227.

APPENDIX C

FLIGHT PLAN INPUT EXPLANTIONS

```
FLIGHT PLANNING-MINIMUM TIME TRACK
1 DAY OF TRIP [ ] 7 TAIL NUMBER [ ]
2 ETD [ ] 8 SPEED [ ]
3 FLIGHT LEVEL [ ] 9 PAYLOAD lbs [ ]
4 ORIG [ ] 10 FUEL UNITS [ ]
5 DEST [ ] 11 EXTRA FUEL [ ]
6 ALTERNATE [ ]

TYPE ABORT FOR FLIGHT PLAN MENU
TYPE RESTART TO BEGIN AGAIN

GMT DATE = 23 GMT TIME = 19:53

1- ENTER DAY OF TRIP:
```

FIELD#	FIELD	HELP REMARKS
1	DATE	Enter day of proposed flight in GMT (ZULU). Current GMT date is displayed in response box.
2	ETD	Enter estimated time of departure in GMT (ZULU). Flight plan cannot be prepared more than 30 hours in advance. Current GMT time is displayed in response box.

FIELD# FIELD**HELP REMARKS**

- 3 FLIGHT LEVEL
Enter "LF" to have the computer select an altitude where "Least Fuel" is burned. Enter "LL" to have the computer calculate a plan in the "Low Level" airway structure (below 18,000). Enter a 2 or 3 digit number to "Hold" the plan to a specified level or below.
EX: "90" would "CAP" the altitude selection at 9000 ft. Entry of "290" would cap the altitude selection at 29000 ft.
- 4 ORIGIN
Must be the standard 3 letter code as defined by the FAA. EX: "LAX" would indicate the Los Angeles Int'l airport.
- 5 DEST
Must be the standard 3 letter code as defined by the FAA. EX: "JFK" would indicate the John F. Kennedy Int'l airport in New York.
- 6 ALTERNATE
Must be the standard 3 letter code as defined by the FAA. Press [RETURN] if no alternate required. Enter "NA" if no alternate available as in the case of an island destination with only 1 airport.
- 7A TAIL NUMBER
Enter tail number to be used in flight. Can be a maximum of 6 alphanumeric characters. For this option, you must register your aircraft with Aviotex.

FIELD#	FIELD	HELP REMARKS
7B	A/C TYPE	Enter "generic" Type of aircraft as available from Flight Planning Menu item No. 5 (Aircraft Types available).
8	SPEED	Enter the desired speed from the list displayed on the screen. EX: (Gulfstream 3) 85 or 80 or MR. (MACH. 85, MACH. 80 or Maximum Range). These speeds are tabulated speeds as provided by the manufacturer.
9	PAYLOAD	Press [RETURN] for maximum payload or enter up to 6 digits depending upon aircraft size. EX: 100 equals 100 lbs -- 5000 equals 5000 lbs.
10	FUEL UNITS	Press [RETURN] to obtain output in lbs or enter the conversion factor for lbs to gallons as displayed on the screen. (You may enter values other than the displayed values but they must be no lower than 5 lbs/gal or no greater than 9 lbs/gal.
11	EXTRA FUEL	Press [RETURN] for no extra fuel or enter up to 6 digits. EX: 100 equals 100 lbs extra fuel -- 1000 equals 1000 lbs extra fuel. (This figure is above the normal FAA fuel requirement).

TABS Flight Plan

Warning: Flight Planning currently does not incorporate Meas or Maas

		3		6	4	5	7		
1 ▶	251710Z								
2 ▶	FLT REL AV10416	LAX/LAS		M: 80		A/C G3			
		FUEL	TIME	TOGWT	LDGWT		W/C		
13 ▶	DEST LAS	002111	0040	48703	46592		M026		
14 ▶	CONT	003582	0045					8	
15 ▶	ALTN LAX	002110	0032	DIST 0214	W/C	PO18		36	
16 ▶	HOLD	000000	0000					35	
17 ▶	REQD	007803	0157	ZFW		040900		9	
18 ▶	EXTRA	000000	0000	PAYLOAD		002000		10	
19 ▶	TTL AT TO	007803	0157	RTE MT		DIST 216			
		21	23	25	27	29	31	11	12
20 ▶	CKPT	F/L	DIST	T/H	ZNT	TMP	TAS	FUEL	
		WIND	ZND	M/H	TIME	TRP	G/S	x 10	33
	LAX	CLB	0005	250	001	PO1	CLB	0768	
		02018	005	236	0001	42	---	---	34
	TOC*	270	0036	055	0006	MO1	346	0685	
		03018	031	041	0007	40	330	---	
	DAG	270	0116	046	0015	MO1	347	0621	
		34060	080	032	0022	40	327	---	

PRESS RETURN FOR MENU >>>F

NOTE: >>(F)=PRESS F & (RETURN) TO MOVE TO NEXT PAGE
<<<(B)=PRESS B & (RETURN) FOR PREVIOUS PAGE

TOP OF DESCENT

TOD * 270 0149 038 0006 MO2 346 0593
35057 033 024 0028 39 310 _ _

LAS DSC 0212 045 0012 MO6 DSC 0571
03018 063 031 0040 39 _ _ _

LAS/A DSC 0216 050 0001 MO6 DSC 0569
03018 004 036 0041 39 _ _ _

DESTINATION

(FPL AV10416 I
- G3/R SDI/R
- KLAX2300
- 0347F270 DCT LAX J9 LAS DCT
- KLAS2340 KLAX
- REG/ G3)

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FIX ID	LATITUDE	LONGITUDE
LAX/A	N 33 56.5	W 118 24.4
LAX - CA	N 33 56.0	W 118 25.9
DAG - CA	N 34 57.7	W 116 34.6
LAS - NV	N 36 4.8	W 115 9.5
LAS/A	N 36 5.0	W 115 9.2

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PRESS RETURN FOR MENU

FLIGHT PLAN OUTPUT EXPLANATIONS

FIELD#	FIELD	HELP REMARKS
1	DATE & TIME	Identifies date and time (Z) at which flight plan was made in GMT
2	FLT REL	Flight release. Identifies the company that stores the aircraft information for these flight planning purposes and the flight No. for record keeping. EX: AV10416 would identify Aviotex and the flight number is 10416.
3	CITY PAIR	Identifies the departure point (origin) and destination of the flight plan.
4	SPEED (M)	Identifies the cruise speed of the aircraft used in flight plan. EX: M:82 indicates a MACH .82 plan.
5	AIRCRAFT	Identifies the aircraft (by tail number or generic type) used to calculate flight plan.
6	TOGWT	Identifies the take-off gross weight of aircraft including payload, fuel, operational empty weight, and any extra fuel.
7	LDGWT	Identifies the landing weight of the aircraft at destination.

FIELD#	FIELD	HELP REMARKS
8	WIND COMPONENT (W/C)	Refers to the mean effect of the wind on TAS. The winds provided by the computer are derived from the National Weather Service. EX: "P008" would mean that the ground speed (G/S) will be 8 knots greater than the TAS. "M 008" indicates a minus.
9	ZERO FUEL WEIGHT (ZFW)	Identifies the total weight of aircraft including payload and operational empty weight except fuel.
10	PAYLOAD	Identifies the weight of passengers and any baggage or cargo.
11	RTE	Identifies route chosen between origin and destination. May be a "MT" (Minimum Time Track) or a "MD" (Minimum Distance Track) route.
12	DIST	Identifies the distance between origin and destination in NM.
13	DEST	Identifies destination, fuel and time it will take to get to destination
14	(CONT)	Refers to IFR reserves. Identifies the fuel and time required, either U.S. reserves or Int'l reserves, for flight plan.

FIELD#	FIELD	HELP REMARKS
CONT (continue)	Int'l contingency for non-Turbine aircraft consists of 30 minutes fuel plus fuel for 15% of the total time from origin to destination to alternate, where the alternate is specified. If no alternate, then 30 minutes, plus fuel for 15% of the time from origin to destination.	
15	ALTN	Identifies the alternate chosen for flight fuel and time required to get to the alternate. Also includes distance from destination to alternate and wind component as described in Field 8.
16	HOLD	Identifies the fuel and time needed to fly for 30 minutes, at holding speed, at 1500 feet above alternate airport (required on international flights).
17	REQD	Identifies the fuel and time required for entire flight including alternate, hold, and IFR reserve.
18	EXTRA	Identifies amount of desired extra fuel entered in flight plan, and time corresponding to that fuel, as calculated by the computer.
19	TOTAL AT TAKE-OFF (TTL AT TO)	Refers to the total fuel and time required for flight, including desired extra fuel.
20	CKPT	Identifies checkpoints, or waypoints along route of flight including TOC (Top of Climb) and TOD (Top of Descent).

FIELD#	FIELD	HELP REMARKS
21	F/L	Identifies flight level, or altitude specified in flight plan. Includes climb (CLB) and descent (DSC).
22	WIND	Identifies the average wind direction and speed between last checkpoint and current checkpoint.
23	DIST	Identifies accumulated distance.
24	ZONE DISTANCE (ZND)	Identifies distance between each checkpoint.
25	T/H	Identifies true heading. (T/H) = true course plus/minus wind correction.
26	M/H	Identifies magnetic heading. (M/H) = true heading plus/minus magnetic variation.
27	ZONE TIME (ZNT)	Identifies time between each checkpoint.
28	TIME	Identifies accumulated time.
29	TMP	Identifies outside air temperature (OAT) as related to Int'l Standard Atmosphere (ISA). EX: P10 would mean OAT at altitude would be ISA plus 10 deg. celsius.

FIELD#	FIELD	HELP REMARKS
30	TRP	Identifies height of tropopause, which is associated with jetstreams.
31	TAS	Identifies the true airspeed, in knots, of aircraft related to temp. and atmospheric conditions.
32	G/S	Identifies ground speed. G/S is TAS corrected for winds.
33	FUEL	Identifies fuel remaining at each checkpoint. May be either lbs or gallons at user's choice.
34	FUEL	Here is where the pilot jots down actual fuel remaining.
35	DIST	Distance from destination to alternate.
36	W/C	Wind component to alternate.
37	ATC CODE	Identifies aircraft and NAV equip, origin, destination, alternate, and route of flight as required by ATC when auto filing is permitted.
38	COORDINATES	Lists state identifier, latitude and longitude for each checkpoint in the flight plan.

APPENDIX D

TROUBLESHOOTING PERSONALITY + III

SETTING UP PP3

Symptoms- Displays are proportionately incorrect
PC hangs after dailup is complete

EQUIPMENT SETUP - PAGE 3

The driver options are specific for each particular type of graphics card. Selecting the wrong driver will cause your PC to appear as though it is "Hung" after executing the log on sequence (You will have a blank screen with the cursor in the left hand corner). This is because PP3 is communicating with a graphics card driver selected by you and your system which is not configured with the selected card. Go back and review the drivers available in the PP3SET directory. The window at the bottom of the screen gives details on the driver highlighted. Make sure you select the correct driver. If you can not identify the correct driver for your system, refer to your PC's manual. You can also go through the driver directory in a trial and error routine but this is time consuming and often frustrating.

If you choose the trial and error method, one of the following drivers will most likely work if you are indeed configured with a 16 color card (IBM Enhanced Graphics Adapter or compatible):

EGA320
EGA640
EGA640E
PLT320
TMR640

Note: When executing PP3SET, Microstar assumes you are going to make a change in driver selection. Therefore, when it executes, it defaults to the first driver in the directory. If you have a doubt as to which driver has been selected, use the following DOS "Type" command:

C>TYPE PP3.BAT [RETURN]

The results are:

MVDIAPP PP3COMM.EXE +2 PLT320.SCR PP3COMM.EXE %1

The driver selected will have a ".SCR" extension.
In this example, the "PLT320" driver was selected.

- Symptoms - Blank screen after executing a directory entry.
- NO CARRIER
- PLEASE LOG ON:
USERNAME:
- VALIDATION ERROR
- Blank screen after
Tymnet connection

CONNECTING TO A SERVICE

When you are at the Directory of Services menu of PP3, the [RETURN] key functions as an "Execute" command. Therefore, if you select a service number to modify or setup for TABS access and then hit [RETURN], PP3 will execute and the results will be erroneous. Hit the [ALT + F10] keys to return to the Directory of Services.

Following the examples for connecting to TABS weather briefing service are generally successful with Hayes compatible modem. However if you do encounter errors, check the following:

Note: If your modem is not Hayes compatible, consult your modem manual for the correct command settings to activate your modem. If these settings are correct, then the following troubleshooting procedures can be followed.

- **Blank screen but no apparent dial up:**

Go back and check the Com Port selected. You have 2 choices (Com1 or Com2). Select the opposite choice.

If the results are the same, it would be advised to check the configuration of your modem. It is possible that your system is configured so that there is a conflict of device addresses. i.e. there are two Com Port 1's, or Com Port 2's or a Com Port 2 but no Com Port 1. It is possible that other communications software packages will run under these diverse conditions. Unfortunately, Personalty + III will not.

- **You get a "Connect" message from your modem, hear it go in to the data mode and then get a "No carrier" message:**

Go back and check the connect sequence by the example we have provided. Chances are, you are missing a character before the "^RTABS^M" sequence.

- **You get a "Please log on:" and "USERNAME:" prompt from Tymnet and your connect sequence responds with your TABS USER ID and PASSWORD.**

On rare occasions, the 30 second delay after the Tymnet telephone number is not adequate. This may happen if you have to wait to pick up an outside line, you are in a rotary dialing phone service, or Tymnet is excessively slow in responding to "Ringing". Add a ~5 (Five second delay) before the "A" (Uppercase A) in the second line of the connect sequence.

- **Your USER ID and/or PASSWORD are not automatically entered at the appropriate prompt:**

Check line 3 of the connect sequence in the TABS log on example. It should read as follows:

```
~0~0~0~0999999^M~68888^M
```

Where:

~0	=Wait 10 seconds should be a total of 40 seconds
999999	=Your USER ID
^M	=[RETURN] key to send data
~6	=Wait 6 seconds
8888	=Your PASSWORD
^M	=[RETURN] key to send data

- **Your connect sequence is completed, screen goes blank and your system appears to be in a "Hung" state:**

You have selected a graphics card driver in PP3-SET that is not part of your systems configuration. Hit the [ALT + F10] keys to get back to the Directory of Services. Exit PP3 and execute PP3SET. (See "Equipment Setup" page 72.

SAVING SCREEN DISPLAYS:

Data is captured and saved to disk by individual screens only. You can not dial-up TABS and request files. With that in mind, the following instructions will make the process effortless and economical. We suggest however, that you become familiar with the TABS products and the "Fast Access" keywords. This will save you time and money as you explore these procedures. It is also recommended that you save data to disk before executing your print facilities. (See "Reviewing and printing saved data" below).

- 1) Log on to the TABS service. Hit the [RETURN] to bypass the copyright screen as instructed on the bottom of the screen.
- 2) From the main menu, hit the [CTRL + F1] keys. PP3 will prompt you to save "Captured" or "Incoming" data.
- 3) Hit "I" to save incoming data. The [RETURN] is not necessary. PP3 will prompt you for the name of the file to be saved.
- 4) Use IBM DOS' full file-naming conventions. That is:

A:01JAN.001

Followed by
[RETURN] key

Where:	A:	=Floppy drive A: Saving to Floppy makes housecleaning easier
	01	=The current date ... and ...
	JAN	=Month (To keep TABS on current data)
	.001	=The filenames' extention. Using a numeric ex- tion allows PP3 to auto- matically increment the filename for faster pro- cessing of data.

The prompts will clear from the top of the display

- 5) Use a TABS "Fast Access" keyword to navigate to the screen to be saved. Using menus to finally reach data is time/money consuming!
- 6) Upon completion of page, hit the [PG DN] key. All data from step 4 will be saved to a file 01JAN.001 on the A: drive. If you have used a keyword to navigate from step 4, only the data requested will be saved. If you have used menus to navigate from step 4, all menus and the data requested will be saved.

- 7) Repeat steps 5 and 6 until the desired weather briefing is completed. If the data requested is supported by "Message cont on next page - press F" prompt, do so in repeating steps 5 and 6.
- 8) At the end of your briefing, type the "EXIT" command to exit TABS. This will terminate both your page saving and your on-line session. That's all there is to it. Assuming you save 10 displays, you will have the following files saved to disk:

A:01JAN.001 -THRU- A:01JAN.010

Just by naming one file and using the [PG DN] key you can display all 10 files in sequence.

It's also a good idea to save the "Total session time" page for your recordkeeping. This will allow you to economize your sessions.

You can get a directory of these files using DOS' directory command.

- 9) Hit the [ALT + F10] keys to return to PP3's Directory of Services for either exiting PP3 or reviewing saved data. (See "Reviewing and printing saved data" below)
- 10) Any error messages displayed by PP3 will be parallel to your IBM DOS error messages. All TABS error messages will be displayed in the lower right hand corner of display. Make the correct adjustments.

REVIEWING AND PRINTING SAVED DATA:

USING AN AFTER-MARKET GRAPHICS PRINT UTILITY

Before printing your screen display, you must have "Installed" or "Loaded" your graphics print utility. It is best to load this program prior to executing PP3 for your TABS session. Otherwise you must return to the DOS prompt after your TABS session to do so and this is time consuming.

It is also recommended that you save data to disk before you exercise your print facilities. (See "Saving screen displays" above).

PRELIMINARY: Before reviewing data saved to disk, setup Directory of Services selection in PP3 for "Off-line viewing". To do so, follow the instructions in the "Setting up the software parameters" section of this manual with the following exceptions:

Service Name: Off-line viewing
Connect Sequence: Must be void of characters
Port: Local

All other parameters must be as stated in example Directory of Services for TABS access from the "Setting up the software parameters" section of this manual.

- 1) From the directory of services menu of PP3, select the appropriate directory listing number for "Off-line viewing" and hit [F2]. You should get a blank screen with the cursor in the upper left corner.
- 2) Hit the [CTRL + F2] keys. You will be prompted to "Name the file you wish to display".
- 3) Type the full name of the file to be displayed.

i.e. A:01JAN.001 Followed by the
[RETURN] key

PP3 will prompt for the "Last number of file in billboard"

- 4) Hit the [RETURN] key. PP3 will display the file requested.

- 5) Upon completion, hit the [PG UP] key. PP3 will increment the file extension then display the next file.
- 6) Repeat step 5 until all data has been reviewed.
- 7) To reverse direction of displays, hit the [CTRL + PG UP] keys. PP3 will decrement the file extension then display the previous file.
- 8) To exit this process, hit the [CTRL + F2] keys. PP3 will display a blank screen with the cursor in the upper left corner. From this point you may either display another series of files or return to PP3's Directory of Services by hitting the [ALT + F10] keys.
- 9) To print a completed display hit the [SHIFT + PRTSC] keys (Assuming you have loaded your graphics print utility).

USING THE IBM DOS "GRAPHICS.COM" PRINT UTILITY

If you do not have a special graphics print utility for your printer (I.E. A memory-resident printer driver for your color printer or a "After-market" graphics print utility), then your IBM DOS graphics print utility is a file named "Graphics.Com".

This utility does not support the IBM EGA card in the 16-color mode. You may however switch to the IBM CGA mode and display the saved data in black and white. In doing so, the Graphics.Com file will print the displayed data.

We suggest that you review the data in the color mode and for printing purposes only, switch to the black and white mode.

The above instructions can be followed for reviewing the data in color.

PRINTING SAVED DATA IN THE 2-COLOR BLACK & WHITE MODE:

- 1) Hit the [ALT + F10] keys to return to the directory of services.
- 2) Hit the [F10] key to exit to DOS and respond to the "Y/N" prompt to exit.
- 3) From the DOS prompt, execute the PP3SET program.
- 4) Select the "CGA640" graphics card driver from the Driver Directory and skip through the options page by hitting the [RETURN] key.
- 5) Now you are ready to go back to PP3 and re-display the saved data for printing. The quickest way to do so is to type the following from the DOS prompt:

C>PP3 2 Followed by the [RETURN] key
 (Assuming service directory #2
 is set up for "Off-line viewing")

PP3 will execute thru step 1) to step 2) above (pages 77-79).

- 6) Follow Steps 2) thru 9) above (pages 77-79).

Note: We have found quite a few users will create two (2) DOS sub-directories to facilitate switching from color to B/W to color. One directory (CD\TABS for example) will have PP3 properly configured for logging on to the TABS service for color display and also for "Off-line viewing". The other directory (CD\BWprint) will be configured for the CGA640 driver and service directory 1 setup for "Off-line printing". Where data is saved to the A: drive, then the only steps are:

- 1) Exit PP3
- 2) Switch Directories
- 3) Execute PP3

Note: When executing PP3SET, Microstar assumes you are going to make a change in driver selection. Therefore, when it executes, it defaults to the first driver in the directory. If you are at doubt as to which driver has been selected use the following DOS "Type" command:

```
C>TYPE PP3.BAT [RETURN]
```

The results are:

```
MVDIAPP PP3COMM.EXE +2 PLT320.SCR PP3COMM.EXE %1
```

The driver selected will have a ".SCR" extention. In this example, the "PLT320" driver was selected.

APPENDIX E

PICTORIAL HELP

Reduce Your Time Navigating Through The TABS Service:

Enter the menu selection or keyword followed by the appropriate key described below.

Note: This key will be referred to as the [RETURN] key

TERMINAL TYPE:

KEY:

SCEPTRE OR
PIPU

SEND

COMPUTER OR
TEXT TERMINAL

RETURN OR ENTER OR

IPU

RETURN

Remember: When logging on to the TABS service -

- 1) Press [RETURN] to bypass the copyright page
- 2) Proceed by entering the menu selection or keyword

When navigating through the TABS database -

- 3) Menu selections and keywords can be entered and executed while displays are building

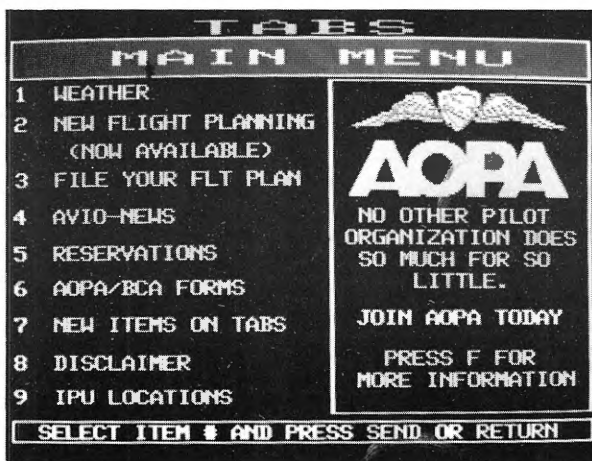
- 4) Sceptre and PIPU Users: In response to the "Press send or return" or "Press return for menu" instructions at the bottom of display page, press the space bar then press the send key.

- 5) Some data requires multiple display pages or have legends in support of them. These pages will be identified by a direction arrow and letter "F" or "B" for turning the pages forward and backward. Enter the appropriate "keyletter" command and press RETURN.

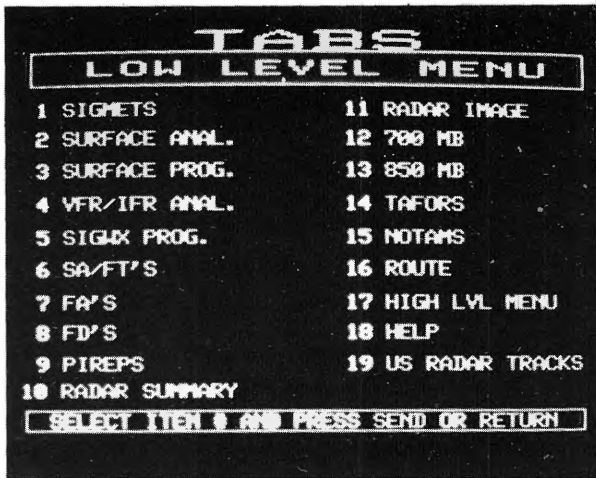
TABS KEYWORD

Keywords allow you to access our services rapidly thus minimizing your briefing time.

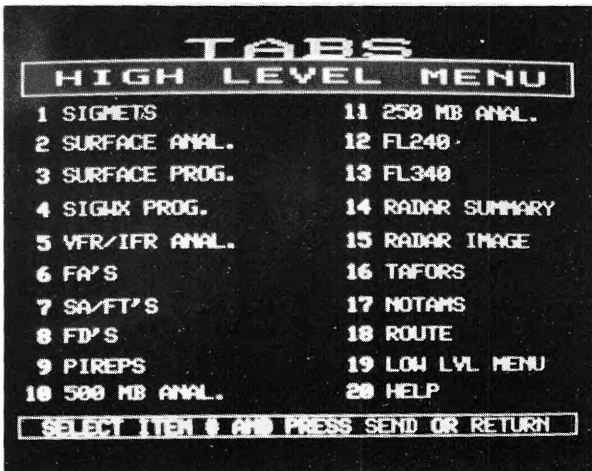
The following list details some of the keywords presently available on TABS. As new features are added to the system, this list will be constantly updated.



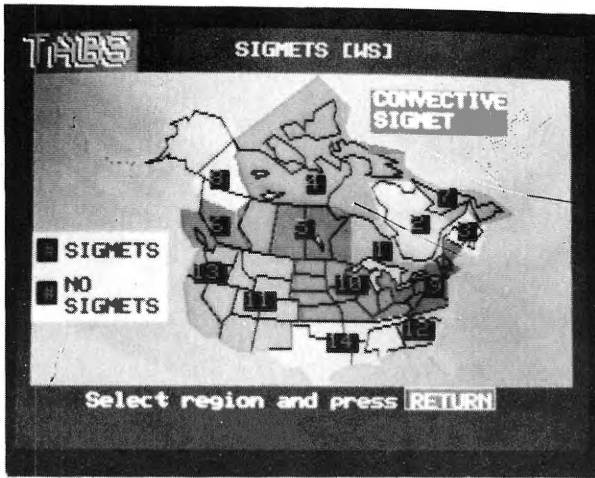
- MAIN - TABS Main Menu
- Enter menu selection



- LL - Low Level Menu
- Enter menu selection



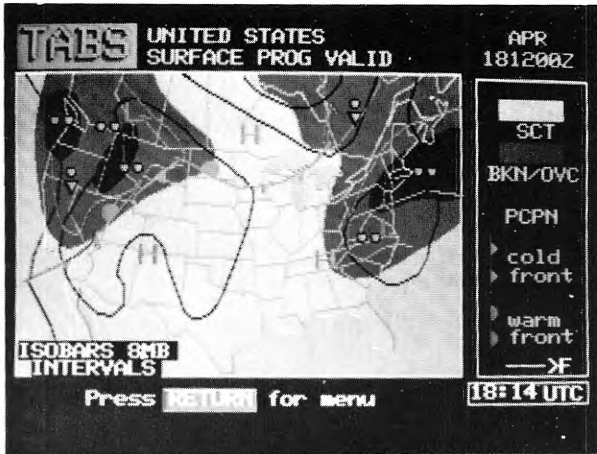
- HL - High Level Menu
- Enter menu selection



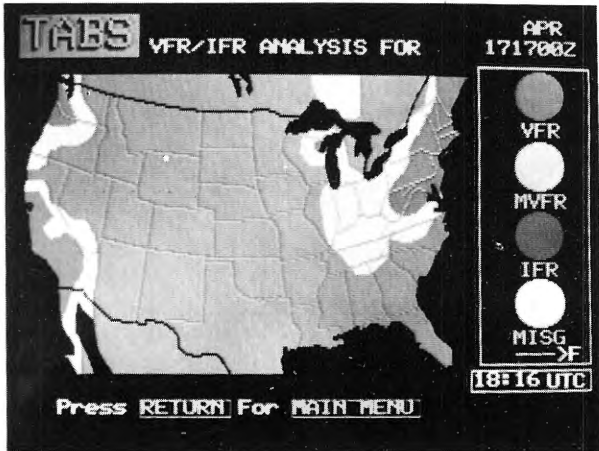
- WS
- Sigmets Analysis Chart
 - Areas reporting sigmets are color coded green
 - Enter region # to review sigmets in effect



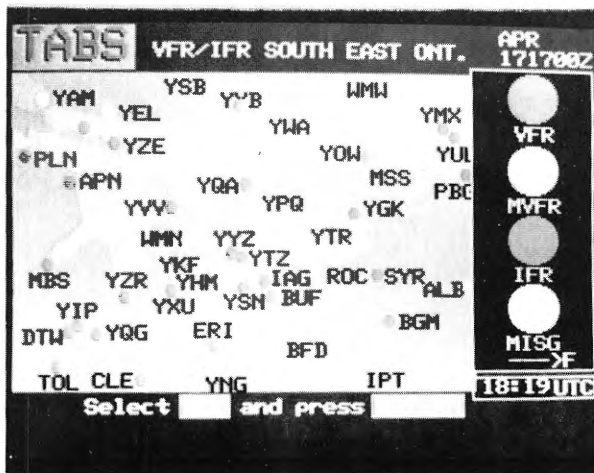
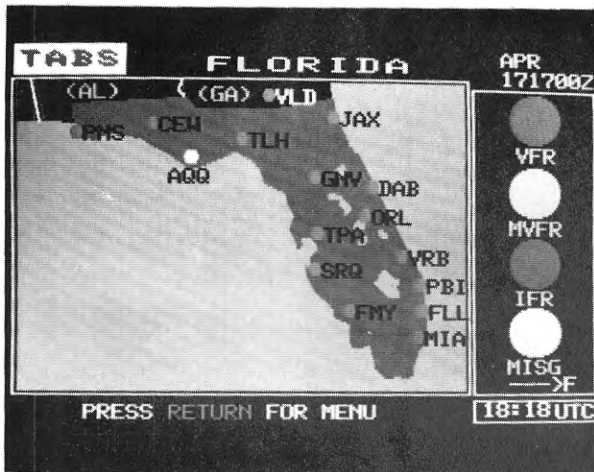
- SFCA
- Surface Analysis Submenu
 - SFCA NAM = North America
 - SFCA CAN = Canada
 - SFCA USA = United States
 - SFCA ALA = Alaska



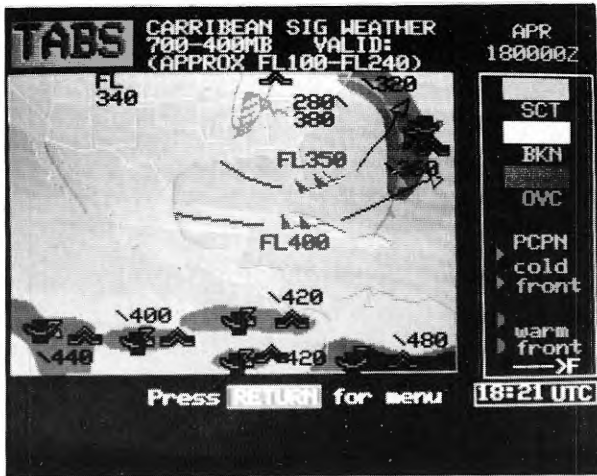
- SFCP - Surface Prognosis Submenu
- SFCP USA = United States
 - SFCP CAN = Canada



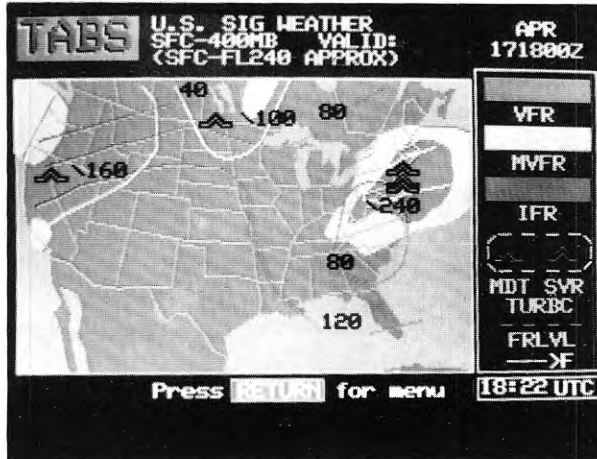
- VFRH - VFR/IFR contours
- VFRH USA = United States
 - VFRH CAN = Canada
 - VFRH ALA = Alaska



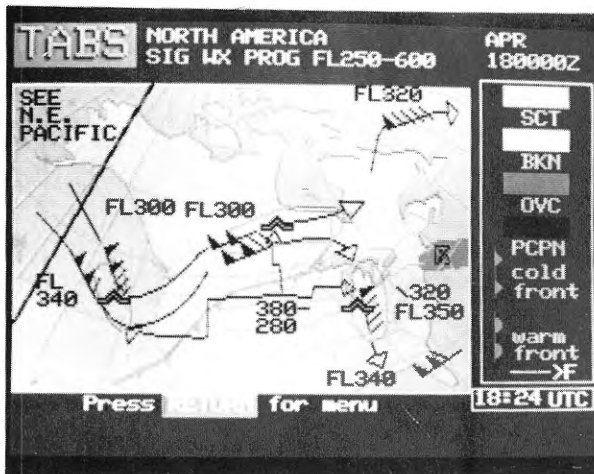
- VFRL** - VFRL/IFR Regional Submenu
- VFRL USA = Dot plot submenu
 - VFRL CAN = Dot plot submenu
 - VFRL XX = State chart
 - VFRL YYYY = Canadian region
 - See abbreviation listing Appendix A



- SWL - SIG WX Prog (Low-mid level) Regional Submenu
- SWL CAN = Canada
 - SWL CAR = Carribean



- VFRP - SIG WX VFR/IFR Prog Submenu Surface To FL 240
- VFR1 = 12 HR SIG WX Prog
 - VFR2 = 24 HR SIG WX Prog

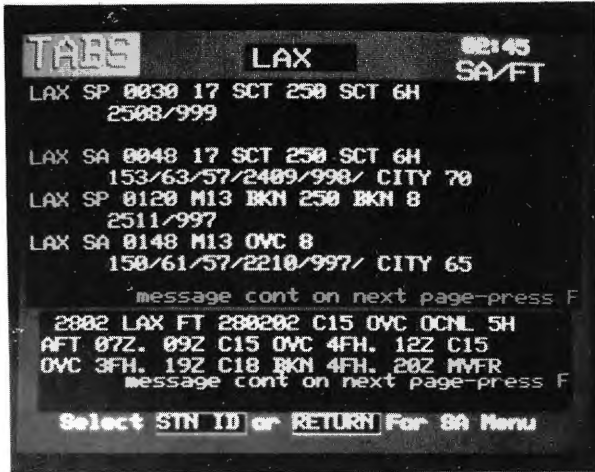


- SWH - SIG WX Prog Submenu Mid To High Level
- SWH NAM = North America
 - SWH NAT = North Atlantic
 - SWH NEP = Northeast Pacific
 - SWH NWP = Northwest Pacific

```

TABS      BOS
BOSH FA 280045
HAZARDS VALID UNTIL 281300
ME NH VT MA RI CT NY NJ PA OH LE LO
WV MD DC DE VA AND CSTL WTRS . FLT
PRTNS... ICG...VT NY NJ PA OH LE LO
...TURBC...ME NH VT MA NY
NJ PA OH LE LO WV MD DC DE
      VA      ...MTN
OBSCN...ME NH VT NY PA
...TSTMS...NY PA OH WV . TSTMS IMPLY
SVR OR GTR TURBC SVR ICING AND LLWS.
NON MSL HGTS NOTED BY AGL OR CIG
THIS FA ISSUANCE INCORPORATES THE
FOLLOWING AIRMETS STILL IN
message cont on next page-press F
  
```

- FA - Regional Area Forecast Submenu
- FA XXX (XXX = 3 letter designator)
see listing in keyword section Appendix A



- SA - Regional Selection Submenu
- SA XXX (XXX = 3 letter designator)
see abbreviation listing in Appendix A

TABS DECODED SURFACE WEATHER

BOS	1752	1650	1550
Sky Cond.	300 BKN 500 OVC	300 OVC	200 OBS
Visibility	3 mi	1 1/2 mi	1/4 mi
Weather	FOG LGT DRZL	FOG LGT RAIN	FOG LGT DRZL
Temperature	41	41	41
Dew point	41	41	41
Wind DIR/SPD	30/14 kt	30/13 kt	30/13 kt
Altimeter	30.04 in	30.05 in	30.05 in

FT DECODE WFR MVFR IFR Valid: 17/17-17

00 02 04 06 08 10 12 14 16 18 20 22 24

- SADE - Regional Selection Submenu
- SADE XXX (XXX = 3 letter designator)
see abbreviation listing in Appendix A

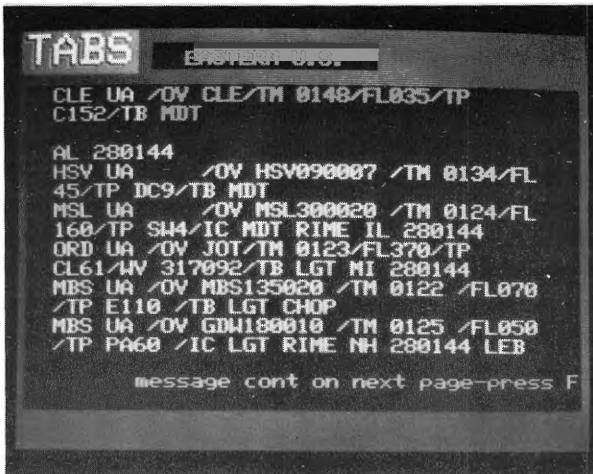
TABS (FD) UPPER LEVEL WIND FORECAST

VALID 210000Z FOR USE 2100-0600Z
DATA BASED ON 231200Z-MGT IN FEET

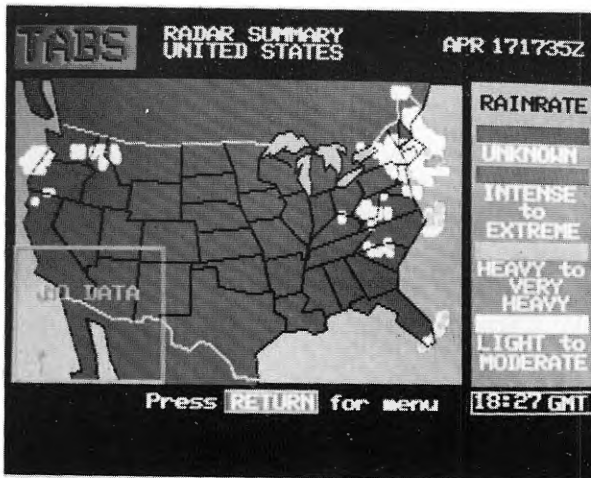
HT			
180	2613-14	3609-15	0818-15
120	2907+01	0211+00	0914-02
90	3106+05	3609+06	1111+06
60	3105+11	3306+12	1308
30	9900	9900	
msl	HDU	DAL	ELP

Select **STN ID** or **RETURN** For FD Menu

- FDL** - Low Level Regional Selection Submenu
- FDH** - High Level Regional Selection Submenu
- Enter menu item # or 3 letter designator
 - FDL VVV WWW XXX YYY ZZZ
 - FDH AAA BBB CCC DDD EEE
 - A/B/C/D/E and V/W/X/Y/Z = 3 letter designator



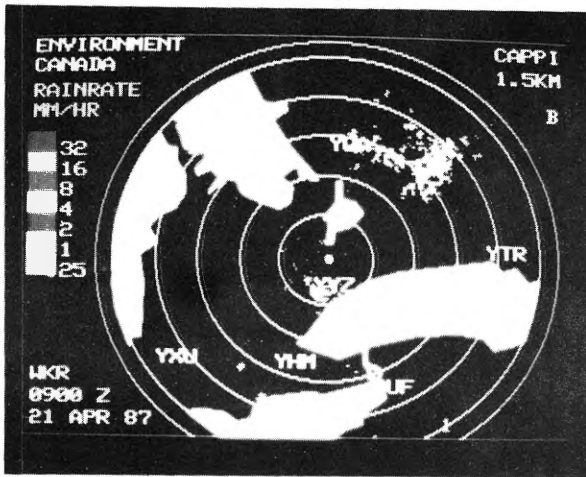
- UA
- Pilot Reports Regional Submenu
 - Enter menu selection
 - UA XXX (XXX = 3 letter designator)
 - See listing Appendix A



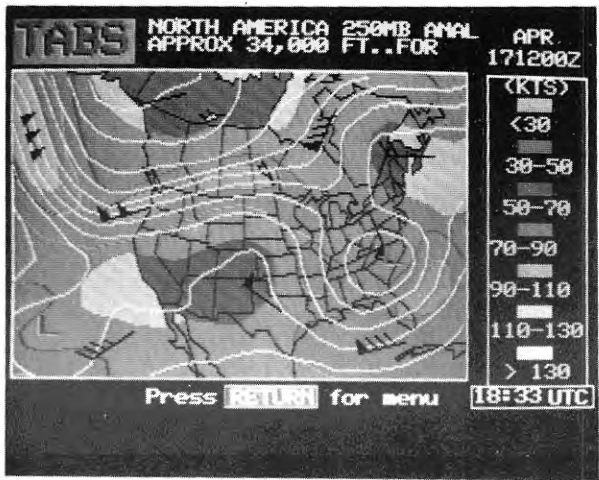
- SD
- Radar Summary Regional Submenu
 - Enter item # selection
 - SD XXXX (XXXX = 4 letter designator)
 - See listing Appendix A

INTENTIONALLY LEFT BLANK

- SD**
- Radar Summary Regional Submenu
 - SD XXX (XXX = 3 letter designator)
See listing Appendix A



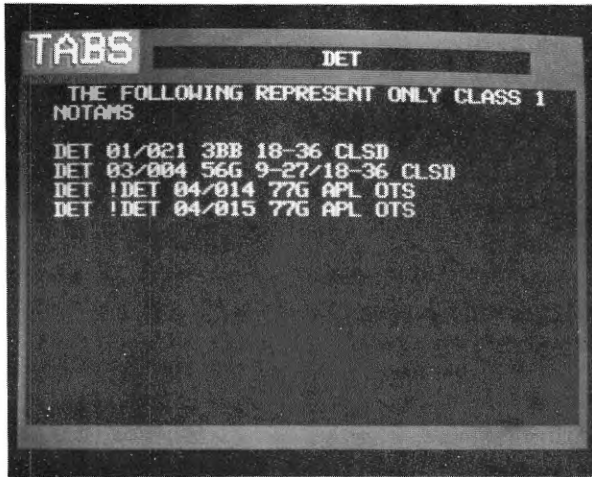
- RAD**
- Radar Image Regional Submenu
 - RAD XXX (XXX = 3 letter designator)
See listing Appendix A



250M - 250 MB Analysis Chart North America



- 500M - Millibar Analysis Chart For North America
- 700M
 - 850M



- NOTE - Notam Regional Submenu For US Notams
- Notl XXX (XXX = 3 letter designator)
See listing Appendix A



ROUTE CONTINUES NEXT PAGE

TABS

SFO-SEA

FT-TERMINAL FORECASTS

2802 SFO FT 280202 250 -SCT 3118. 03Z
6 SCT OCNL C6 BKN 6F. 18Z C6 BKN 6F
3106 OCNL 6 SCT+. 18Z CLR 3012. 20Z
VFR..

NGZ FT NO FORECASTS FOR STATION AT
THE PRESENT TIME

2802 OAK FT 280202 250 -SCT 2910. 03Z
6 SCT OCNL C6 BKN 6F. 18Z C6 BKN 6F
2906 OCNL 6 SCT 6+. 18Z CLR 2906. 20Z
VFR..

message cont on next page-press F
for prev page press B

TABS

SFO-SEA

NOTAM

THE FOLLOWING REPRESENT ONLY CLASS 1
NOTAMS

SFO 04/011 SFO RCLS 1R-19L OTS
NGZ NO CLASS 1 NOTAMS IN EFFECT
OAK 12/013 OAK R2531A/B ACTV 4000/BLO
TIL 05312400
OAK 02/003 WVI LOC OTS
OAK 02/023 WVI PAJAR NDB OTS
HND NO CLASS 1 NOTAMS IN EFFECT
CCR NO CLASS 1 NOTAMS IN EFFECT
APC 04/003 APC 6-24 CLSD
APC !APC 04/003

message cont on next page-press F
for prev page press B

ROUTE CONTINUES NEXT PAGE

TABS (FD) UPPER LEVEL WIND FORECAST

VALID 271800Z FOR USE 1700-2100Z
DATA BASED ON 271200Z-HGT IN FEET

HT			
180	1688-14	1608-14	1608-14
120	1515+01	1515+01	1515+01
90	1513+08	1513+08	1513+08
60	1507+16	1507+16	1507+16
30	9900	9900	9900
msl	SFO	SFO(NGZ)	SFO(ONK)

Select **STN ID** or **RETURN** For FD Menu

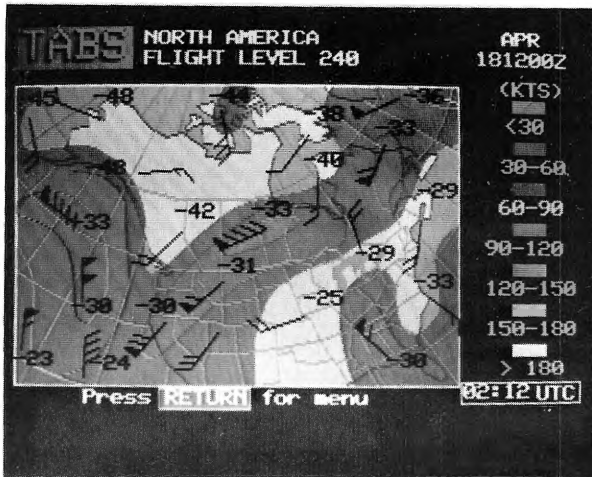
TABS (FD) UPPER LEVEL WIND FORECAST

VALID 271800Z FOR USE 1700-2100Z
DATA BASED ON 271200Z-HGT IN FEET

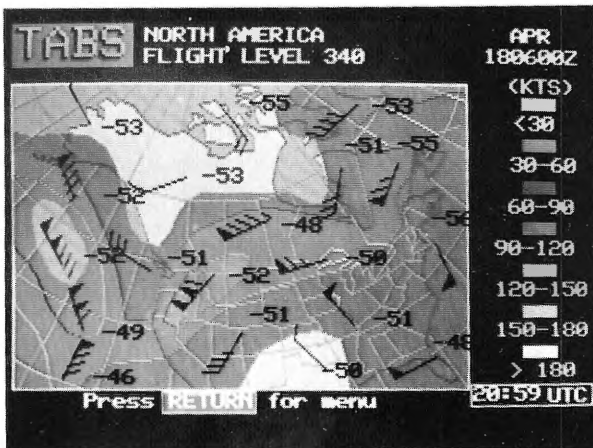
HT			
180	2024-15	2024-15	
120	2028+01	2028+01	
90	2025+08	2025+08	
60	2017+14	2017+14	
30	2007	2007	
msl	SEA	SEA(BFI)	

Select **STN ID** or **RETURN** For FD Menu

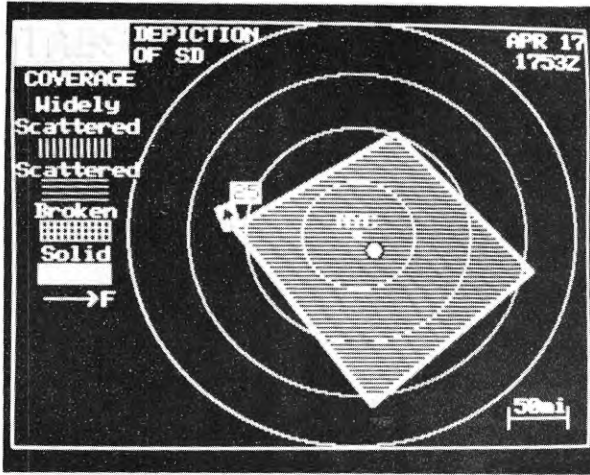
- ROUL - Low Level Route Weather Instructional Submenu
- ROUH - High Level Route Weather Instructional Submenu
- ROUL AAA ZZZ
 - AAA = departure 3 letter designator
 - ZZZ = destination 3 letter designator



- FL24**
- Wind Analysis Submenu For 24,000 Feet
 - Enter menu item # selection
 - FL24 XXX (XXX = 3 letter regional designator)
- See listing Appendix A



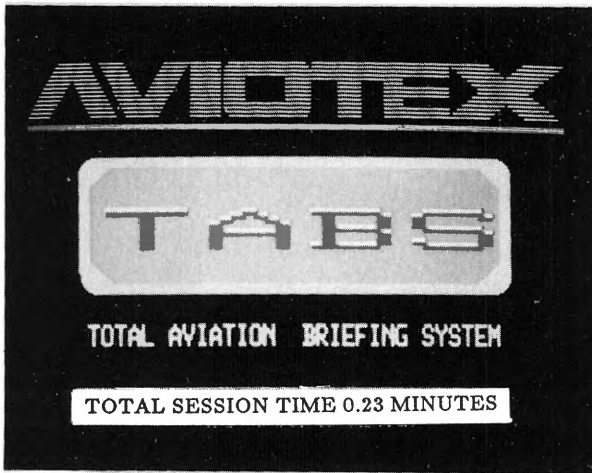
- FL34**
- Wind Analysis submenu For 34,000 Feet
 - Enter menu item # selection
 - FL34 XXX (XXX = 3 letter regional designator)
- See listing Appendix A



- SDUS** - Radar Tracking Regional Submenu
- Enter item # selection
 - Enter 3 letter designator
 - SDUS XXX (XXX = 3 letter designator)



- HELP** - Places You In The Help Section Of The TABS Service



EXIT - Disconnects You From The TABS Service

SUGGESTION BOX

Aviotex always welcomes suggestions you may have to better serve your needs.

If you have any suggestions or comments about TABS services or an idea for a service which may be beneficial to our users, please complete the form below and mail to us. We appreciate your comments.

AVIOTEX
3158 Redhill Avenue
Suite 270
Costa Mesa, Ca 92626

TO: Aviotex Date: _____

FROM: Name: _____

Address: _____

Phone: (Day) _____ (Evening) _____

COMMENTS/SUGGESTION: _____

